

1. [img]image_http://www.drrajusgre.com/quant_database.php [/img]

If $x + y > 90$ then
Col A: AB
Col B: BC

2. Given two points in the coordinate system $x(-2, 1)$ & $y(1, 2)$ then asked to find the slope?

3. [img]image_http://www.drrajusgre.com/quant_database.php [/img]

Given two circles with radius 2m & 3m as above, if the distance between their centers is 20m then what is the least possible distance between the two circles?

- A. 15
B. 16
C. 17
D. 18

4. If $(63)^n$ is divisible by 3^{16} then
Col A: n
Col B: 7

5. If $(ab)^6 = b^{-4}c^{-8}$
Col A: $(ab)^9$
Col B: $(b^{-2}c^{-4})^3$

6. If $150 < y < 300$ then
Col A: $2y$
Col B: 400

7. If $xy > 1$ and $x - y = 1$, then
Col A: x
Col B: y

8. If $x - y = 1$ & $x, y > 0$ then
Col A: $x^2 - y^2$
Col B: 0

9. Given a sequence from -8 184 and this sequence is obtained by adding 3 to the previous number. If 'n' is the total number of numbers in the series then
Col A: n
Col B: 65

10. There is a rectangular board in which width is 75% of length and the perimeter of the rectangle is given as 280. Find the diagonal length of the rectangle?

11. $5000 + \sqrt{6.894 \times 7001.2}$ is approximate equal to
A. 5000
B. 5700
C. 6000
D. 6500
E. 7000[img]

1)d

2) $2\sqrt{3}$

3)question is not clear

4)a

5)b

6)d

7)d

8)a

9) ?

10)100
11)a

i think

2. $1/3$ as $(2-1)/(1-(-2))=1/3$

7. is A

8. D

9. C

hi diesel,
below are ans with explanation and if you find ny error pls let me knw.

4. A
 $(63)^n = (7^n) * (3^{2n})$
for above to be divisible by 3^{16} the least value of $2n=16$ so $n=8$
which is greater than 7.

5.C

$(ab)^6 = (b^{-4}) * (c^{-4})$ 🤖
take sqrt of both sides

$(ab)^3 = (b^{-2}) * (c^{-4})$

$(ab)^9 = ((ab)^3)^3 = (b^{-2} * c^{-4})^3$

- 2. $1/3$
- 3. 15
- 5. C
- 7. A
- 9. C

Can ny1 explain to me d 11th one.....cuz i solved it on the calci.....n i get 5219.69.....which is not there in any of the options

All d best to ye guyz for ur GRE....juz dont take tension bout it.....

1.

If $x + y > 90$ then

Col A: AB

Col B: BC

Answer: D (can't tell, need more info)

AB is proportionate to angle y and BC to x . If $x=y=60$ then $AB=BC$. If $x=60$ and $y=90$ then $AB>BC$, we can conclude the answer is D.

2. Given two points in the coordinate system $x(-2, 1)$ & $y(1, 2)$ then asked to find the slope?

Slope $= (y_2 - y_1) / (x_2 - x_1) = (2 - 1) / (1 - (-2)) = 1/3$ or 0.33333.... depending on the choices that are given.

3.

Given two circles with radius 2m & 3m as above, if the distance between their centers is 20m then what is the least possible distance between the two circles?

A. 15

B. 16

C. 17

D. 18

4. If $(63)^n$ is divisible by 3^{16} then

Col A: n

Col B: 7

$(63)^n = (9^n) \times (7^n) \setminus 63 = 3 \times 3 \times 7$

$3^{16} = 9^8$ ($3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$...18 times $= (3 \times 3) \times (3 \times 3) \dots 8$ times)

Now, for $(9^n) \times (7^n)$ to be divisible by 9^8 , n must be at least equal to 8. so the answer should be A.

5. If $(ab)^6 = b^{-4} \cdot c^{-8}$

Col A: $(ab)^9$

Col B: $(b^{-2} \cdot c^{-4})^3$

$\setminus (ab)^6 = b^{-4} \cdot c^{-8}$ $(ab)^6 = 1 / (b^4 \cdot c^8)$ $((ab)^3)^2 = [\setminus ((ab)^3) \cdot ((ab)^3) = [1 / (b^2 \cdot c^4)] \cdot [1 / (b^2 \cdot c^4)] \setminus 1 / (b^2 \cdot c^4)]^2$
and $((ab)^3) = [1 / (b^2 \cdot c^4)]$.

Now $(ab)^9$ can be written as $[(ab)^6] \cdot [(ab)^3]$ therefore $(ab)^9 = [1 / (b^4 \cdot c^8)] \cdot [1 / (b^2 \cdot c^4)]$
 $= 1 / [(b^4 \cdot c^8) \cdot (b^2 \cdot c^4)] = 1 / [(b^6) \cdot (c^{12})] = 1 / \{ [(b^2) \cdot (c^4)] \times [(b^2) \cdot (c^4)] \times [(b^2) \cdot (c^4)] \} = 1 / [(b^2 \cdot c^4)^3]$ and finally $= [(b^{-2} \cdot c^{-4})^3]$.

So, the answer is C.

Of course, you won't have time to be doing all those fancy computation during the real GRE exam. However, in case someone trying to figure out how I reach this solution, then here you are. I am also looking for a better shortcut for these types of GRE questions. So please do not hesitate to let me know.

6. If $150 < y < 300$ then

Col A: $2y$

Col B: 400

D, because $2y$ will be between 300 and 600 exclusive.

7. If $xy > 1$ and $x - y = 1$, then

Col A: x

Col B: y

The following sketch (of $y > 1/x$ and $y = x - 1$) shows that if x and y are both > 0 then $x > y$. Similarly, if x and y are both < 0 , say $x = -5$, the y will be -6 , x is again bigger than y . so answer is A.

Please let me know if I am wrong, and also please give me a shortcut.

(drawing cannot post)

8. If $x - y = 1$ & $x, y > 0$ then

Col A: $x^2 - y^2$

Col B: 0

(drawing cannot post)

Col A will be always bigger. Because x will always be bigger than y (which also means $x^2 - y^2$ will always be > 0), and also the line $x - y = 1$ will never touch the x -axis ($x, y > 0$).

Please suggest Shortcuts!!!!

9. Given a sequence from -8 184 and this sequence is obtained by adding 3 to the previous number. If 'n' is the total number of numbers in the series then

Col A: n

Col B: 65

158 numbers. \from [0 to 184]=

8 \From [-1 to -8] numbers

$185 + 8 =$ I need a scientific calculator please!!!!

$193/3$ is 6.... and the unit digit will be like $13/6$ which is 2....and less than 3 thus less that $193/3$ is less than 63 and therefore less than 65. So B.

10. There is a rectangular board in which width is 75% of length and the perimeter of the rectangle is given as 280. Find the diagonal length of the rectangle?

$0.5 \times 280 = 140$ half the perimeter, which in turn is $w + l$. $75\% \text{ of } l = (3/4) * l$. so $w + l = 3/4l + l = 7/4l$. thus $140 = 7/4l$ and $l = 140 * 4/7 = 20 * 4 = 80$. Then $w = 60$.

Now $d = \sqrt{80^2 + 60^2} = \sqrt{6400 + 3600} = \sqrt{10000} = 100$

11. $5000 + \sqrt{6.894 * 7001.2}$ is approximate equal to

A. 5000

B. 5700

C. 6000

D. 6500

E. 7000

I think A cannot be the answer!!! Because the question say $5000 + \text{something positive}$. We know E and D are also out. Now I need to play with $\sqrt{6.894 * 7001.2}$ to see what is going on between B and C.

I know 7001.2×6.894 will be close to 7000×7 , which in turn will be 49000. $\sqrt{49000} =$

$\sqrt{4900 * 10} = 70 * \sqrt{10} = 70 * 3.... = 210... \text{far less than } 1000$. So C is also out. And I am left with only B.

Here, even though the 5210 is closer to 5000 than to 5700, I think we are being required to think $5000 +$.

Anyway this is really tricky.

1. If n is positive integer greater than 0.

Col A: Unit digit of 156^n

Col B: Unit digit of 165^n

2. Given that a set A contains odd numbers less than 100, set B contains even numbers less than 5 & set C is formed by multiplying all the numbers of set A with set B.

Col A: set c

Col B: 100

3. $5000 + \sqrt{6.894 \times 7001.2}$ is approximate equal to
A. 5200
B. 5700
C. 6000
D. 6500
E. 7000
4. There are 5 green balls, 3 black balls and 2 red balls in a box. If 2 balls are taken from it without replacement what is the probability that the selected balls are red?
5. Number of divisors of 72 which have 4 in its unit place
A. 1
B. 2
C. 3
D. 4
E. 5
6. Col A: $|10^{-3}|$
Col B: $|10^3|$
7. Col A: Standard deviation of 29, 33, 35, 37, 39, 43
Col B: Standard deviation of 221, 225, 227, 229, 231, 235
8. Col A: Value of $((1/0.001) + (1/0.099))$
Col B: Value of $((1/0.002) + (1/0.098))$
9. Given the area of the sector as $5/4\pi$. Find the perimeter of the sector of the circle of angle 72° ?
10. Given a sequence from -8 184 and this sequence is obtained by adding 3 to the previous number. If 'n' is the total number of numbers in the series then
Col A: n
Col B: 65

hi my ans are:

1. A
2. C
3. C
4. $1/45$
5. B
6. B
7. C
8. A
9. $\pi/2$
10. B

all members please confirm.

1. If n is positive integer greater than 0.
Col A: Unit digit of 156^n
Col B: Unit digit of 165^n
A: because $6 \times 6 = 36$, $36 \times 6 = \dots 6$, $6^3 \times 6 = \dots 6$ this shows it will always end with 6.
similarly col B will always end with 5
2. Given that a set A contains odd numbers less than 100, set B contains even numbers less than 5 & set C is

formed by multiplying all the numbers of set A with set B.

Col A: set c

Col B: 100

I'm not sure if I understand this question well. But I go for D, because $2*4=8$ and the smallest odd number less than 100 is 3, and then $8*3 < 100$. By then, $8*51$ (another odd number less than 100) is > 100 . so D.

3. $5000 + \sqrt{6.894 * 7001.2}$ is approximate equal to

- A. 5200
- B. 5700
- C. 6000
- D. 6500
- E. 7000

This time it is A. Because $\sqrt{6.894 * 7001.2} = \text{almost } \sqrt{7 * 7000} = \sqrt{49000} = 70 * \sqrt{10} = 70 * 3.16 \dots = 210$. $5000 + \sqrt{6.894 * 7001.2}$ is close to 5200 than to anyother proposed solution.

4. There are 5 green balls, 3 black balls and 2 red balls in a box. If 2 balls are taken from it without replacement what is the probability that the selected balls are red?

$$(1/10) * (1/9) = 1/90$$

5. Number of divisors of 72 which have 4 in its unit place

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

B. Because $72/18=4$ and $72/3=24$

6. Col A: $|10^{-3}|$

Col B: $|10^3|$

B

7. Col A: Standard deviation of 29, 33, 35, 37, 39, 43

Col B: Standard deviation of 221, 225, 227, 229, 231, 235

Gaps for col A are: 4,4,2,2,4

For col B: 4,2,2,4,4,

Answer C

8. Col A: Value of $((1/0.001) + (1/0.099))$

Col B: Value of $((1/0.002) + (1/0.098))$

A. because the denominator of ColA will smaller after rearranging.

9. Given the area of the sector as $5/4\pi$. Find the perimeter of the sector of the circle of angle 72degree?

Don't understand. Could someone explain please.

10. Given a sequence from -8 184 and this sequence is obtained by adding 3 to the previous number. If 'n' is the total number of numbers in the series then

Col A: n

Col B: 65

I got this wrong the first time. I think this should be handled like series, whereby

$n=1$ then $S_1 = -8$

$n=2$ then $S_2 = -5 = S_1 + 3$

$n=3$ then $S_3 = -2 = S_2 + 3$

$n=4$ then $S_4 = 1 = S_3 + 3$

$n=5$ then $S_5 = 4 = S_4 + 3$

$n=6$ then $S_6 = 7 = S_5 + 3$

.....

At n, we will have $184 = S_n = S_{(n-1)} + 3$

=====

$$184 = -8 + 3(n-2+1) = -8 + 3n - 3$$

$$184 + 8 + 3 = 3n$$

$$N = 195/3 = 65, \text{ so C is the answer.}$$

$$\text{Col A: } [(1/0.001) + (1/0.099)] = [(0.001 + 0.099) / (0.001 \times 0.099)] = 0.1 / \dots$$

$$\text{Col B: } [(1/0.002) + (1/0.098)] = [(0.002 + 0.098) / (0.002 \times 0.098)] = 0.1 / \dots$$

At this stage, both col have the same numerator but col A has smaller denominator that is $(0.001 \times 0.099) < (0.002 \times 0.098)$.

To quickly compare (0.001×0.099) & (0.002×0.098) without hassle, just multiply both sides by 1000, then you will get (1×0.099) & (2×0.098) , which become obvious.

The fraction with the smaller denominator will be larger.
I hope this helps.

Please, people with better shortcuts, please make an effort to post them.

1. What is the remainder of the following $(7^0 + 7^1 + 7^2 + 7^3 + \dots + 7^{23})/14$?
2. If the standard deviation of 21, 22, 23, 24, 27, 28, 29 & 33 is x, then what is the standard deviation of 221, 222, 223, 224, 227, 228, 229 & 233?
3. Given set $S = \{1, 2, 3, 4, 5\}$ and $T = \{1, 2, 3, 6, 8\}$, let any element chosen from set S be 's' and any element chosen from set T be 't' and let $s*t = n$. Then in how many answers are possible for n?
4. If $y = kx - 5$ has a x intercept of $-10/3$, what is the value of k?
5. If $x = -8$
Col A: $7x^2 + 3x$
Col B: $7(-\text{😬})^2 + 3(-\text{😬})$
6. $\{1 / (2 - \sqrt{3})\} =$
7. A vendor was selling an item at certain price then marked it down 20% for spring. During summer again he marked it down 20% from spring price. If the item is sold at the summer price what percent of the original price did he sell for?
8. A person went to market with a red and a green bag and bought 10 carrots & 6 radishes. On the way to home he distributed vegetables into the two bags in such a way that no bag is empty. In how many ways can he do this?
9. In how many ways, the letters of the word POLLOLOP can be arranged?
10. If 60% children like cats, 70% like dogs and 80% like rabbits then exactly how many children like all three animals?
11. A figure was given, it had a rectangular box in which 16 cylindrical cans, each with radius of 1 inch are placed. If the cans touch adjacent cans and/or the walls of the box. Find the interior area of the bottom of the box?
12. If the rate of inflation was 1000% then what will be the cost of an article two years from now, which costs 6 units of currency now?
A. 666
B. 660
C. 720
D. 726
E. 730
13. At a soccer match, the contractor provided dinner for 24 persons, and fixed the price so as to gain 12.5% upon his total outlay. Three of the players being absent, the remaining 21 paid the fixed price for their dinner, and such the contractor lost one rupee.
What was the charge for the dinner?

14. There is a semi circle and person A takes 2min to walk around the semicircle path, and B takes 1 minute to walk along the diameter

CoL A: Average speed of A

CoL B: Average speed of B

15. $5000 + \sqrt{6.894 \times 7001.2}$ is approximate equal to

A. 5200

B. 5700

C. 6000

D. 6500

E. 7000

1---- $7^0/14$ leaves remainder 1

$7^0 + 7^1/14$ leaves remainder 8

$7^0 + 7^1 + 7^2/14$ leaves remainder 1

$7^0 + 7^1 + 7^2 + 7^3/14$ -----8

It follows a pattern for even powers it leaves remainder 1 and odd powers leaves remainder 8

so ans is 8

2-----standard deviation is same

so ans is x

3-----17 if phi is included else 16

4----- $y = mx + c$ if $y = 0$ then $x = -c/m$ is x intercept given it as $-10/3 = -c/m$

$10/3 = -5/k$ $k = -3/2$

5-----equal (c)

7-----consider initial amount as 100

so after 20% reduction it is 80 and after 20% increase it is 96

so it is sold for 96% of the actual price

9----- $8!/3! \times 3! \times 2!$ ---8 for total letters and L and O repeats for 3 times and P repeats for 2 times

11---- might be 64

2×32 or 8×8

14-----ans is A A--- $2\pi r/2 = \pi r$

B--- $2\pi r$

$\pi r > 2\pi r$ so ans is A

1.

What is the value of x?

2. How many of the following 2, 4, $|-8|$, $\sqrt{19}$ & 8 have their square 4 more than the multiples of 5?

3. Col A: $(0.001)^{-10}$

Col B: $1/(10)^{-10}$

4. Given a table with some variables as 'u', 'v', 'r', 's' & 't' whose product is even and also it is given that product of 'uvrs' & 'uvr' as even and product of 'rs' as odd. Which of the following options cannot be odd?

- A. R
- B. s
- C. t
- D. u
- E. v

5. Given six variables arithmetic mean as 80 and given first 3 has an average of 60 then asked to find

Col A: How many numbers of the last 3 numbers can be greater than 80

Col B: 3

(Question might be given like this)

6. If $x*y = y/1/x$ then

Col A: $4*4/3$

Col B: $3/4*4$

7. If $(ab)^6 = b^{-4}*c^{-8}$ then

Col A: $(ab)^9$

Col B: $(b^{-2}*c^{-4})^3$

8. If n is positive integer greater than 0 then

Col A: The unit place of 156^n

Col B: The unit place of 165^n

9. Given $x < y$ & $p < r < t$. If these 5 numbers are placed in ascending order from left to right, which cannot be placed in second place?

- A. x
- B. y
- C. p
- D. t
- E. r

10. There is a semi circle and person A takes 2min to walk around the semicircle path, and B takes 1 minute to walk along the diameter

Col A: Average speed of A

Col B: Average speed of B

11. $5000 + \sqrt{6.894*7001.2}$ is approximate equal to

- A. 5200
- B. 5700
- C. 6000
- D. 6500
- E. 7000

12. Col A: $100!/99!$

Col B: $(100! - 99!) / 98!$

13. What was the remainder, when $1+7+49$ is divided by 14?

14. If $2^n > 10^{15n}$ then which of the following options satisfies the condition

- A. 30
- B. 45
- C. 60
- D. 75

15. A circle represents 600\$ and asked to find how much angle will make 120\$

16.

What is the possible range of x ?

A. $3 < x < 7$

& so on.....

17.

Find the values of (a,b) in terms of k, x & y ?

18. If $1 < a < 2, 3 < b < 4, 5$ Col A: ab/c

Col B: $1/6$

19. If $n > 0$

Col A: $1/9$ of n

Col B: 11% of n

20. Given integers from -8 to 184 such that each next number exceeds the previous by 3 , if ' n ' is number of integers in the sequence then

Col A: n

Col B: 65

21. If $2^x + y - 2^{x-y} = 0$, find y ?

22. If 20% of houses in US are at NE. 35% of the houses in NE were occupied by rentals. What % of houses US were in NE and occupied by rentals?

23. If 6^n is multiple of 24 then what is the least value of n ?

1. cudn't get the diag properly

2. 4

3. A

4. --

5. D.....(1 or 2 or all 3 can be greater than 80)

6. A

7. C

8. A

9. D

10. B

11. A

12. B

13. 1

14. 60,75 (BOTH SATISFY)

15. 72

16. $2 < X < 8$

17. $b = y - k$ (cudn't get a)

18. A

19. A

20. C

21. 0

22. 7%

23. 3

hi
for 10th sum
A travel $5r$ in 2min --- $\rightarrow 2\pi r/2(\text{semi circumference}) + 2r(\text{dia})$
B travel $2r$ in 1 min
so $A > B$
ans A

[quote="anush"]hi
for 10th sum
A travel $5r$ in 2min --- $\rightarrow 2\pi r/2(\text{semi circumference}) + 2r(\text{dia})$
B travel $2r$ in 1 min
so $A > B$
ans A[/quote]

can any one explain 7th sum

1. If the ratio of length, breadth and height of a rectangular box is 1:2:3 and if the total surface area of the box is 550 then what is the volume of the box?

2. If $2 < xy < 4$ and $1 < y < 2$ then

Col A: x

Col B: 2

3. Given a cylindrical-can which can be filled up to a capacity of 3cubic.feet.

Hint: 1 yard = 3 feet

Col A: The Amount of liquid where 100 such cans carry in cubic.yard

Col B: 13cubic.yard

4. A person is supposed to collect 3 out of 5 accessories & 4 out of 5 accessories. How many such combinations can he come out of this?

5. Col A: $(5^{20}-5^{19})/20$

Col B: 5^{18}

6. If 1 Col A: ab/c

Col B: 3

7. If $A_n = [(-1)^{(2n-1)}] * (2n-1)$ then find the sum of 25 terms?

8.

Given two triangles, one triangle inserted in another as above. The vertices of big triangle is ABC & smaller triangle i.e. the inner triangle is PQR such that $AB \parallel PQ$ and $AC \parallel PR$. Given angle A is y degrees, angle R is z degrees & exterior angle of A is x degrees.

Col A: x

Col B: $y+z$

9. If n is an integer

Col A: $(-1)^{6n+9}$

Col B: $(-1)^{2n+3}$

10. If $1/3$ of n is 5 less than $2/5$ of n then what is the value of n ?

11. When n is divided by 24 it gives a remainder of 21 then what is the divisor?

A.3

B.5

C.7
& so on....

12. Given Set A = {5, 6, 7, 8, 9} & Set B = {26, 27, 28, 29, 30}
If one element is chosen from Set A say 'X' and one from Set B say 'Y' then how many different values of $x+y$ are possible?

13. Given A= {Set of odd integers less than 100}
B= {Set of even integers less than 5}
C= {Set which include product of both sets A and B}
Col A: number of integers in set C
Col B: 100

14.

Given the ratio of the areas of the (above) two circles as 2:1. If the area of the bigger circle is " π " then what is the distance between their centers (or what is the length of the line joining their centers)?

15. If Average of a, b, c, -5, -15 is 's' and average of a, b, c, 5, 15 is 't' then what is the value of (s-t)?

16. Given a line in xy plane with slope $k = -1/2$
Col A: x-intercept
Col B: y-intercept

17.

If all the seven circles are shaded like above then what is the area of unshaded region?

18. If the median of a seven number sequence is $2n+2$ then find the Arithmetic mean of that sequence?

19.

What is the perimeter of the figure?

20. Given $(s-t)^2 = 16$ where $t=2$
Col A: s
Col B: 6

21. Given $(x+5)^2 - (y-3)^2 = 0$ & $x+y = 2$
Col A: $x-y$
Col B: 0

22. Given that r and s are two integers between 650 and 690. If x is the difference between the digit at tenth position of r and tenth position of s then
Col A: x
Col B: 2

23. If the sum of digits of a two digit number xy is 6 more than the difference between the digit at tenth place and unit digit then find the value of y?
A. 1
B. 2
C. 3
D. 4
E. Cannot be determined

24. The approximate value of $((61.16)(.9)^2)/\sqrt{401}$ is
A. 5

- B. 4
- C. 3
- D. 2
- E. 1

25. Given that the lines k and m pass through point $(1, 1)$. If the slope of k is less than that of m & if k passes through $(0, a)$ and m passes through $(0, b)$, then

Col A: a

Col B: b

26. The area of town A which lies in city B is 20% of the area of city B not in town A

Col A: Ratio of area of A to that of B

Col B: $18/1$

27. In a class of certain number of students, if $1/2$ of the students takes math's as their major, $2/3$ takes physics as their major & $1/3$ takes both math's and physics as their majors and if 80 students didn't take any of math's or physics subjects as their major then what is the total number of students in the class?

1.750

2.D

3.B

4.50

5.C

6.B

7.-196

8.D

9.C

10.75

11.Question & answers are not proper

12.9

13.A

14. $1+1/\sqrt{2}$

15.-8

16.D

17.Question is not properly given

18. $2n+2$

19. $\pi+5$

20.D

21.B

22.D

23.C

24.C

25.D

26.B

27.480

1. If x, y, z, u, v, w, t are non-zero numbers then what are the possibilities for the terms not being zero if $xyz = uvwt$?

2. Perimeter of a parallelogram is given as 360

Col A: length of diagonal

Col B: some value like $\sqrt{9 \cdot 27}$

3. A cylindrical mould having height 12ft, filled to half of its capacity which is equal to 96π . Find circumferential area?

4. A series was given as 9, 10, 11, 12, 13, 14..... In this series odd numbers are negative integers.

Col A: Sum of first 27 integers in series

Col B: -22

5. Which of the following lines has maximum slope?

A. $y - x/4 = 5$

B. $y - x/2 = 10$

C. $y + 3x = 10$

D. $y + 3x/2 = \dots$

E. $y + x/2 = \dots$

6. Given a line passing through origin at 50 degree to horizontal and a point P(r,s) on the line, then

Col A : r

Col B : s

7. If n is divided by 24, the remainder is 21. Which of the following is the divisor of n?

A. 3

B. 4

C. 6

D. 9

E. 10

8. Given $N = (-2)^x$ where x is a negative integer. If 'm' is the difference between the highest possible value of N and the least possible value of N?

col A: m

col B: $3/4$

9. A person A completes a work at a steady rate in 12 mins and another person B completes the work with varying rates. If both work together they finish the job in 8 mins. Find the rate at which B works?

A. 3

B. 6

C. 10

D. 21

E. 24

10. Given 'k' is an odd integer greater than 100 and if it is a multiple of 'd' other than k itself.

Col A: d

Col B: $k/2$

11. If $27 < x^3 < 125$ then

Col A: x

Col B: 4

12. Given a series -9,10, -11,12, -13.....80.

Col A: sum of first 27 numbers

Col B: -22

13. There are 35 females in a club having average of their age as 'f' and there are 45 males in a club having average of their age as 'm'. If 'f' is greater than 'm', then

Col A: Average age of all 80 members

col b: $(f+m)/2$

14. Given a cylindrical-can which can be filled up to a capacity of 3cubic.feet.

Hint: 1 yard = 3 feet

Col A: The Amount of liquid where 100 such cans carry in cubic.yard

Col B: 13cubic.yard

15. Given $A = \{\text{Set of odd integers less than 100}\}$

$B = \{\text{Set of positive even integers less than 5}\}$

$C = \{\text{Set which include product of both sets A and B}\}$

Col A: number of integers in set C

Col B: 100

16. $5000 + \sqrt{6.894 \times 7001.2}$ is approximate equal to
 A. 5200
 B. 5700
 C. 6000
 D. 6500
 E. 7000

17. Col A: $100!/99!$
 Col B: $(100! - 99!) / 98!$

18. If 6^n is multiple of 24 then what is the least value of n?

19. If $x - y = 1$ then
 Col A: $x^2 - y^2$
 Col B: 0

20. $(\sqrt[2]{\text{😬}}/\sqrt{112}) - (\sqrt{7}/\sqrt{112}) =$
 A. $1/16$
 B. $4/3$

1. D
2. D
3. 96π
4. C
5. B
6. B
7. A
8. C
9. E
10. B
11. D
12. C
13. B
14. B
15. A
16. A
17. B
18. 3
19. D
20. $1/4$ (IS DER ANY SIMPLE METHOD TO SOLVE DIS)

5. Which of the following lines has maximum slope?

- A. $y - x/4 = 5$
- B. $y - x/2 = 10$
- C. $y + 3x = 10$
- D. $y + 3x/2 = \dots$
- E. $y + x/2 = \dots$

The answer is C i think... slope = -3 implies tanX and hence X is maximum... it doesn't matter whether X is negative or posi...

8. Given $N = (-2)^x$ where x is a negative integer. If 'm' is the difference between the highest possible value of N and the least possible value of N?

col A: m
 col B: $3/4$

let $x = -y$, where y is a pos integer, then $N = 1 / ((-2)^y)$. therefore max val is when y is 0 i.e. $N = 1$... minimum value

requires more light on y ... since in gre only real numbers are considered infinity cannot be value of y and hence the least possible val depends on y .. i feel the ans is D...

15. Given $A = \{\text{Set of odd integers less than } 100\}$
 $B = \{\text{Set of positive even integers less than } 5\}$
 $C = \{\text{Set which include product of both sets A and B}\}$
Col A: number of integers in set C
Col B: 100

its C?? $50 + 50$ for 2 and 4 resp....

please correct if wrong....

i first all want to thanks drrajus teams and staff for postion all this question i got almost from the previously posted questions

Given $A = \{\text{Set of odd integers less than } 100\}$
 $B = \{\text{Set of positive even integers less than } 5\}$
 $C = \{\text{Set which include product of both sets A and B}\}$
Col A: number of integers in set C
Col B: 100

If x and y are prime numbers greater than 10 then which of the following is an even integer?

- A. x^2y^2
- B. $x^y + 2$
- C. $xy + 2$
- D. $2xy + xy$

If there are 33 balls arranged in 7 boxes which of th following is true.

- (i) at laest one box has more than 5
- (ii) there are more than one boxes with 4
- (iii) there is atleast one box empty

- A. I only
- B. ii only
- C. i and ii
- D. i and iii
- E. None

There are 5 terms in a series a_1, a_2, a_3, a_4, a_5 and a_n is given as $a_n = n\{(-1)^n - 1\}$. Find the difference between the greatest and smallest term?

Given $(s-t)^2 = 16 = 2$

Col A: s when t
Col B: 6

Given $(x+5)^2 - (y-3)^2 = 0$ & $x+y = 2$

Col A: $x-y$
Col B: 0

The area of town A which lies in city B is 20% of the area of city B not in town A

Col A: Ratio of area of A to that of B
Col B: 18%

Given a series $x, 2x+2, 3x+4, 4x+6$ & $5x+8$

Col A: Mean of above series
Col B: Median of above series.

Given set $S = \{1,2,3,4,5\}$ and $T = \{1,2,3,6,8\}$, let any element chosen from set S be 's' and any element chosen from set

T be 't' and let $s*t = n$. Then in how many answers are possible for n?

$$x < 3$$

$$y < 2$$

col a xy

col b 6

$$\{(1^{-1} + 2^{-1})\}^{-1}$$

1. Col A: 0.9999/0.9998
Col B: 1.0002/1.0003

2. There are 5 terms in a series a_1, a_2, a_3, a_4, a_5 and a_n is given as $a_n = n \{(-1)^n - 1\}$. Find [the difference](#) between the greatest and smallest term?

3. If an amount of 2000\$ is given for [annual interest](#) at 'r'% rate and if 150\$ is received as an interest for 1 year then find the value of r?

4. Given set $S = \{1, 2, 3, 4, 5\}$ and $T = \{1, 2, 3, 6, 8\}$, let any element chosen from set S be 's' and any element chosen from set T be 't' and if $s*t = n$. Then in how many answers are possible for n?

5. Given $(s-t)^2 = 16$ where $t=2$

Col A: s

Col B: 6

6. The approximate value of $((61.16)(0.9\text{😬}^2)/\sqrt{401})$ is

- A. 5
- B. 4
- C. 3
- D. 2
- E. 1

7. Given that the lines k and m pass through point (1, 1). If the slope of k is less than that of m & if k passes through (0, a) and m passes through (0, b), then

Col A: a

Col B: b

8. Col A: $(0.001)^{-10}$

Col B: $1/(10)^{-30}$

9. If the standard deviation of 21, 22, 23, 24, 27, 28, 29 & 33 is x, then what is the [standard deviation](#) of 221, 222, 223, 224, 227, 228, 229 & 233?

10. These are scores of a student in two tests for which 1000 students appeared in each test. Mean Score student's

score percentile

Test 1: -- 250 400 90th

Test 2: -- 200 360 xth

11. What is the remainder of $(7^0 + 7^1 + 7^2 + 7^3 + \dots + 7^{20})/14$?

12. Given $A = \{\text{Set of odd integers less than } 100\}$

$B = \{\text{Set of positive even integers less than } 5\}$

$C = \{\text{Set which include product of both sets A and B}\}$

	Col A: number of integers in set C
	Col B: 100

13. If x and y are prime numbers greater than 10 then which of the following is an even integer?

- A. $x^2 \cdot y^2$
- B. $x^y + 2$
- C. $xy + 2$
- D. $2xy + xy$

14. If there are 33 balls arranged in 7 boxes which of the following is true.

- (i) At least one box has more than 5
- (ii) There are more than one boxes with 4
- (iii) There is at least one box empty

- A. I only
- B. ii only
- C. i and ii
- D. i and iii
- E. None

15. Given $(x+5)^2 - (y-3)^2 = 0$ & $x+y = 2$

	Col A: $x-y$
	Col B: 0

16. The area of town A which lies in city B is 20% of the area of city B not in town A

	Col A: Ratio of area of A to that of B
	Col B: 18%

17. Given a series $x, 2x+2, 3x+4, 4x+6$ & $5x+8$

	Col A: Mean of above series
	Col B: Median of above series.

18.

Given a figure like above (triangle inscribed in the circle) such that height = radius and base is twice the radius. If the area of the triangle is given as 60 then what is area of the circle?

19. If RST is isosceles triangle with $RS = ST$, and P be a point on the side RT, then which of the following conditions must be true:

- i) $SP \perp RT$ ii) $SP \parallel RT$ iii) $ST > RP$

20. A quadrilateral was given with sides 3, 5 and 8 and y (some value greater than 10). Find the range of the diagonal?

- A. 3 B. 4 & so on.....

1.A

2.10

$a_1 = -2, a_2 = 0, a_3 = -6, a_4 = 0, a_5 = -10;$

3.7.5%

4.17

5.17

6.C

7.B

8.C

9.C

10.?

11.1

Consider only $(7^1 + 7^2 + 7^3 + \dots + 7^{20})/14$
 $\Rightarrow 7(7^0 + 7^1 + 7^2 + 7^3 + \dots + 7^{19})/14$
 $\Rightarrow (1 + \text{sum of odd no. of odd no.s})/2$
 $\Rightarrow (1 + \text{odd no.})/2 \Rightarrow (\text{even no.})/2$ (remainder=0)
 \Rightarrow so the remainder is 7^0 which is not considered initially i.e 1

12.B

13.?

14.B(if 2nd option is "There are more than one boxes with more than 4")
or else E

15.B

16.D

17.C

18.60PI

19.?

20.?

The answer for Q-2 is -8 not -10 i reckon.

Heres why;

$$a_n = n \{(-1)^{n-1}\}$$

$$a_5 = 5 \{(-1)^{5-1}\} = -10$$

$$a_1 = 1 \{(-1)^{1-1}\} = -2$$

$$a_5 - a_1 = -10 - (-2)$$

$$= -8$$

Im sorry The answer for Q-2 is 4(difference is always +ve)

$$a_1 = -2,$$

$$a_2 = 0,$$

$$a_3 = -6,$$

$$a_4 = 0,$$

$$a_5 = -10$$

$$a_3 - a_5 = -6 - (-10) = 4$$

i think the answer to 4 is 19

i think you forgot to multiply the 4 and 5 by the 1 in T

Heres why;

$$a_n = n \{(-1)^{n-1}\}$$

$$a_5 = 5 \{(-1)^{5-1}\} = -10$$

$$a_2 = 2 \{(-1)^{2-1}\} = -2 = 2(1-1) = 2*0 = 0$$

$$\text{So } |a_5 - a_2| = 10$$

1.

If the diameter of inner circle is equal to radius of outer circle, find the area of the shaded region?

2. Col A: $13 - 2(\sqrt{7})(\sqrt{5})$

Col B: 0

3. If $(x+5)^2 - (y-3)^2 = 0$ & $x+y=2$ then

Col A: $x-y$

Col B: 0

4. What is the perfect number close to square root of 171?

a.13

b.14

c.9

d.25

e.75

5. Given five numbers x_1, x_2, x_3, x_4, x_5 whose average is S and three more numbers are given y_1, y_2, y_3 whose average is T . What is the total average of $x_1, x_2, x_3, x_4, x_5, y_1, y_2$ and y_3 ?

A. $5S+3R/8$

B. $S/8$

C. $R/8$

D. $S+R/8$

E. $3S+5R/8$

6. Col A: $(-2)^{-3}$

Col B: $(-4)^{-3}$

7. Given series $x, 2x+2, 3x+4, 4x+6, 5x+8$ where x is a positive number

Col A: Mean of the above series

Col B: Median of the above series

8. A parallelogram diagram is given whose length is 9 and breadth is 6 and the angle between the breadth and length is given as ' x ' degrees (x degrees is greater than 90).

Col A: Area of the parallelogram

Col B: 50

9. Area of city A which lies in city B is 20% of the area of city B.

Col A: the percent of city A within city B

Col B: 18%

10. Given ' k ' and ' m ' as two numbers whose LCM is ' km ' & ' m ' and ' n ' are two numbers whose LCM is ' mn '. If $k, m, n > 0$

Col A: LCM of ' k ' and ' n '

Col B: ' kn '

11. Given range of ' n ' numbers as 9.5 and the range of ' q ' numbers as 21.5. If the two lists are combined then range of $(n+q)$ numbers? (It is also given that the numbers in the two lists are different and in increasing order)

12. Given that the number of architects in an organization is $1/4$ of the total and the organization hired 60 more persons of which 50 are architects and after which the ratio of architects increased from $1/4$ to $1/3$. Find the number of people in the organization if none of them have gone out of the organization?

13. A right angled triangle ABC is given whose sides have been extended to form three squares.

Col A: Area of square formed by hypotenuse.

Col B: sum of areas of squares formed by other two sides

14. If an amount of 40,000 is split and invested, one portion at 4.5% and the remaining at 6% and if the

cumulative interest at the end of 1 year is 1890(not sure) then
Col A: Interest yielded by the portion with 4.5%
Col B: xxx (some number)

15. There are 'x' boxes and the balls are arranged in such a way that no ball is remained. If the number of boxes is reduced by 3 and if 12 balls are arranged in them, then 5 balls are left behind. What is the original number of boxes 'x'?

- A. 8
- B.14
- C.26
- D.31
- E.34

16. If $s=(1,2,3,4,5)$ & $T=(1,2,3,4,5)$ & if 'P' is a product of 'S' and 'T' how many such values are possible for 'T'?

hey friends ,i wrote my exam on 19th and i got 1070 , 780 in quant n 290 in verbal .in the examinationin quant i got 5 similar questions from this thread and 1 from verbal ,u can trust this forum but only 20%(that too only quant) . thanx a lot Dr.Raju .

- 1. $3(\pi)r^2/4$
- 2.A
- 3.B
- 4.A
- 5.A
- 6.A
- 7.C
- 8.?
- 9.A
- 10.D
- 11.21.5
- 12.360
- 13.?
- 14.?
- 15.?
- 16.14

1. If $2^n < 10^{15}$, then how many of the following numbers can take the place of n?
A. 30
B. 45
C. 60
D. 75

2. When 'w' is divided by 14, the remainder is zero. If 'w' is three lesser than it value and when divided by 15, its remainder is 14. What is the value of 'w'?

3. If the selling price of a product is 25% lesser than its list price and 40% greater than its cost price, then what is the list price of the product if the cost price = 30 ?

- A. 52
- B. 53
- C. 56

& so on.....

4. Given $N = (-2)^x$, where x is a negative integer. If 'm' is the difference between the highest possible value of 'N' and the least possible value of 'N'?

- Col A: m
- Col B: $3/4$

5. Col A: $(1/.001)+1/.999$

Col B: $(1/.002)+1/.998$

6. Given that 'r' and 's' are two integers between 650 and 690. If x is the difference between the digit at tenth position of 'r' and the digit at tenth position of s, then

Col A: x

Col B: 2

7. If the standard deviation of 'p' number of people is 21.5 and standard deviation of 'q' number of people is 9, then what is that least possible standard deviation value when both p and q are added?

8. If $z > 0$, $w > 0$ then

Col A: $w^4 + z^2$

Col B: $z^2 + w$

9. If 100 Col A: $2y$

Col B: 400

10.

Given a figure like above i.e. the diameter of the semicircle as the third side of a triangle and the angle opposite to it is as 60 and other two sides of the triangle as equal. If the circumference of the above semicircle is 50π then what is the perimeter of a triangle?

11. Given a list of 5 integers with the mode & median of the list as 4 and 7. If the average of the greatest integer and the second greatest integer of the list is 20 then what is the total average of the list of numbers?

12. Given a point (a, b) which lies below x-axis and left of y-axis then

Col A: a

Col B: b

13. Given 'k' is an odd integer greater than 100 and if it is a multiple of 'd' other than k itself.

Col A: d

Col B: $k/2$

14. Given a series -9, 10, -11, 12, -13..... 80.

Col A: sum of first 27 numbers

Col B: -22

15. $5000 + \sqrt{6.894 \times 7001.2}$ is approximate equal to

A. 5200

B. 5700

C. 6000

D. 6500

E. 7000

16. Col A: $100!/99!$

Col B: $(100! - 99!) / 98!$

17.

If $AD = x$, then find the perimeter of triangle ABC?

1.B

$$\begin{aligned} 10^{15} &= 2^{15} \times 5^{15} \\ &= 2^{15} \times (2^{2.33})^{15} \\ &= 2^{15} \times 2^{35} \\ &= 2^{50} \end{aligned}$$

2. 182 (Can be verified from options... otherwise its a tedious job to Calculate)

3.C

4.A

The least possible value is 0.

Highest possible value is $(-2)^{-0.1} = -1$

So difference is 1

5.A

6.D

7.??

8.D

9.If question is $y < 300$ then ans is D

10.150

11.11

given avg of highest & 2nd highest no.s (they has to be 1st 2no.s) is 20 i.e sum of 1st 2no.s=40...

median=7 i.e 3rd no. is 7

mode=4 i.e 4th & 5th no.s are 4 (since mode is most repeated no.)

now avg= $(40+7+4+4)/5=11$

12.??

13.D

14.C

15.A

16.B

17. $x(3+\sqrt{3})$

1. Given Perimeter of a parallelogram ABCD as 360 units

Col A: Length of diagonal AC

Col B: $9\sqrt{2}$

2. Which of the following lines has maximum slope?

A. $y - x/4 = 5$

B. $y - x/2 = -1$

C. $y + x = 10$

D. $y + 3x/2 = 4$

E. $y + x/2 = -3$

3. If n is divided by 24, the remainder is 21. Which of the following is the divisor of n?

A. 3

B. 4

C. 5

D. 6

E. 7

4. Given that a machine P completes a certain amount of work in 12hrs and machine Q completes the same amount of work individually in x hrs. If both machines work together they complete the same amount of work in 8hrs then what is x?

5. Col A: $0.001^{-1} + 0.999^{-1}$

Col B: $0.002^{-1} + 0.998^{-1}$

6. If $k > 0$ and if $x = k^3$ & $y = k^2$ then

Col A: x^6

Col B: y^9

7. Given $S = 7^0 + 7^1 + 7^2 + \dots + 7^{20}$. If r is remainder when S is divided by 14, then

Col A: r

Col B: 1

8. If $(x-y)^2 = 16$ & $y = 2$ then

Col A: x

Col B: 2

9. Last year, $\frac{1}{4}$ of factory workers are architects. one year ago 60 workers newly joined in which 50 are architects and no one left the factory since last year and if now $\frac{1}{3}$ of factory workers are architects then find the total number of workers?

10. Given $ax+by+c=0$

- i. If a, c both are positive, then x intercept is negative
 - ii. If a, b both are positive, then y intercept is positive
 - iii. If b, c both negative, then y intercept is positive
- which of the above conditions satisfy?

- A. Only i
- B. Only ii
- C. Both i and ii
- D. All i, ii, iii

(Question is similar to this)

11. If $ax+by+c=0$ & if $a, b > 0$

Col A: slope

Col B: 0

12. A person A completes a work at a steady rate in 12 mins and another person B completes the work with varying rates. If both work together they finish the job in 8 mins. Find the rate at which B works?

- A. 3
- B. 6
- C. 10
- D. 21
- E. 24

13. There are 35 females in a club having average of their age as 'f' and there are 45 males in a club having average of their age as 'm'. If 'f' is greater than 'm', then

Col A: Average age of all 80 members

col b: $(f+m)/2$

14. Given $A = \{\text{Set of odd integers less than } 100\}$

$B = \{\text{Set of positive even integers less than } 5\}$

$C = \{\text{Set which include product of both sets A and B}\}$

Col A: number of integers in set C

Col B: 100

15. Col A: $0.999/0.998$

Col B: $1.002/1.001$

16. If x, y, z are positive integers and if $3x = 4y = 10z$, then what is the least possible value of z ?

- A. 3
- B. 1
- C. 9
- D. 6
- E. Cannot be determined

if any wrong please tell me

- 1.D
- 2.B
- 3.A
- 4.24
- 5.A
- 6.C
- 7.C
- 8.D
- 9.?????

- 10.
- 11.B
- 12.E
- 13.???
- 14.D
- 15.A

9.no. of arc =y and no.of emp = x
last year $y=x/4$
now $y+50 = (x+60)/3$
solving these two equns we get $x=360$
so now total no.of emp are = $360+60$

10.x intercept = $-c/a$
y inter = $-c/b$
so cond(i) only satisfies

ans is A

13. avg of total 80 members = $(35f+45m)/80$
given $f>m$ this gives $(f+m)/2$ as greater one if compared

ans is B

14. ans is A
coz u can include negative odd integers also in the set A

16. ans is D
take lcm of 3,4 and 10 which is 60 , u get 60 in 10z only when $z=6$

plz correct me if wrong anywhere

3. If n is divided by 24, the remainder is 21. Which of the following is the divisor of n?
- A. 3
 - B. 4
 - C. 5
 - D. 6
 - E. 7

can somebody give me the answer to this question as wat im gettin is somethin like this

$$(n-21)/24=1$$
$$n=45.$$

so divisor of n??????

also jus struck ma mind ... there can also b a case such that ...

$$21\%24=21 \dots\dots$$

im confused help!

Hi,

i tink the divisor for n is 3 from the list of options,.....

for ex: let $n=45$, divisor = 5,3

$n=69$, divisor=3

Divisor of a number is same as factor of the number

Please let me know in case of any issues

oopz ... my assumptions were wrong!

3. If n is divided by 24, the remainder is 21. Which of the following is the divisor of n?

- A. 3
- B. 4
- C. 5
- D. 6
- E. 7

the answer is 3 for sure!

Soln

$(n-21)/24 = \text{some integer}$

$\rightarrow (n/3-7)/8 = \text{some integer}$

as n should be an integer so it should be divisible by 3!

lemme knw if ne doubts...

1. There is a junior and senior team who have taken tests. The average of junior team members who have taken tests are 88 and the average of senior team members is 92

Col A: the average of senior and junior team

Col B: 90

2. Given 0.61 Col A: square root(x)

Col B: 0.73

3. A toy manufacturer company manufactures 20,000 toys and exports $\frac{3}{4}$ and $\frac{1}{10}$ and donates some (xxx) value for charitable trust.

Find the number of toys left in the company?

4. There are rooms from 101 to 550 inclusive in which the starting rooms are numbered from 1, 2, 3 and the waiting rooms are numbered from 4,5,6. What is the probability that the rooms 4, 5, 6 will be chosen randomly?

5. One side of a triangle is given as 6 and the triangle is equilateral triangle & another triangle is joined with it whose side is 10

Col A: perimeter of polygon

Col B: 30

(Question is similar to this)

6. Given a line in xy plane with slope $k = -1/2$

Col A: x-intercept

Col B: y-intercept

7. If $x < y$ then
Col A: $x^2 + x + 1$
Col B: $y^2 + y + 1$

8. Which of the following number is nearer to $\sqrt{171}$?
A. 12
B. 13
C. 14
D. 15
E. 16

9. When a number is divided by 12, the remainder is 5. What is the remainder when the square of that number is divided by 8?

10. The area of circle of radius 'r' is twice the the area of triangle then r in terms of h is?

11. Col A: $0.001^{-1} + 0.999^{-1}$
Col B: $0.002^{-1} + 0.998^{-1}$

12. If the selling price of a product is 25% lesser than its list price and 40% greater than its cost price, then what is the list price of the product if the cost price = 30 ?
A. 52
B. 53
C. 56
& so on.....

13. If x and y are prime numbers greater than 10 then which of the following is an even integer?
A. $x^2 + xy$
B. $x^y + 2$
C. $xy + 2$
D. $2xy + xy$

14. If $z > 1$ & $z(x+y+z) = zx + zy + z$
Col A: z
Col B: 0

15. If $x < 2$ & $y < 3$
Col A: xy
Col B: 6

16. The average salary of n employees is 32000, average salary of another different group of n-1 employees is 33000
Col A: The average salary of 2n-1 employees
Col B: 32500

17. The range of 'p' numbers is 9.5 and the range for 'q' numbers is 21.5, what is the least range value when p and q are combined together?

18. A series was given as 1, -3, 5, -7, 9, -11, 13, In this series odd numbers are negative integers. Find the sum of first 25 numbers in the series?

19. If n is an integer then
Col A: $(-1)^{6n+9}$
Col B: $(-1)^{2n-1}$

20. A trapezoid is given whose area is 12, length of it is given as 6 & height of it is given as 3. Find the perimeter of trapezoid?

1. C
2. A
3. ?
4. $\frac{1}{3}$
5. ?
6. D
7. D
8. 13
9. 1
10. $r = h/\pi$
11. B
12. C
13. ?
14. D
15. B
16. D
17. 21.5
18. ?
19. A
20. figure should be given. Use formula $A = \frac{1}{2}(h)(s_1 + s_2)$

1. There is a junior and senior team who have taken tests. The average of junior team members who have taken tests are 88 and the average of senior team members is 92
Col A: the average of senior and junior team
Col B: 90

Ans: D (It can be anywhere between 88 and 92)

2. Given 0.61 Col A: square root(x)
Col B: 0.73

Ans: A (square of .73 is less than .6)

3. A toy manufacturer company manufactures 20,000 toys and exports $\frac{3}{4}$ and $\frac{1}{10}$ and donates some (xxx) value for charitable trust.
Find the number of toys left in the company?

Ans : $20000 - 15000 - 2000 - (xxx)$

4. There are rooms from 101 to 550 inclusive in which the starting rooms are numbered from 1, 2, 3 and the waiting rooms are numbered from 4,5,6. What is the probability that the rooms 4, 5, 6 will be choosed randomly?

Can anyone explain this?

5. One side of a triangle is given as 6 and the triangle is equilateral triangle & another triangle is joined with it whose side is 10
Col A: perimeter of polygon
Col B: 30
(Question is similar to this)

Ans: D Cannot be determined unless specied how the triangle is joined.

6. Given a line in xy plane with slope $k = -\frac{1}{2}$
Col A: x-intercept
Col B: y-intercept

Ans: D The equation derived is $x + 2y = \text{Constant}$. X and Y will have different values satisfying this equations.

7. If $x < y$ then

Col A: $x^2 + x + 1$

Col B: $y^2 + y + 1$

Ans D Try $x=2 < y=3$ then $A < B$. $x=-2$ and $y=-1$ $A > B$

8. Which of the following number is nearer to $\sqrt{171}$?

A.12

B.13

C.14

D.15

E.16

Ans : B

9. When a number is divided by 12, the remainder is 5. What is the remainder when the square of that number is divided by 8?

Ans:

$$(12x+5)^2/8$$

$$(144x^2 + 2 \cdot 120x + 25)/8$$

$$25/8$$

Remainder=1 (Rest of the terms are divisible by 🤖)

10. The area of circle of radius 'r' is twice the the area of triangle then r in terms of h is?

Ans: $\pi r^2 = 2 \cdot 0.5 \cdot b \cdot h$ (assuming h=height and b=base of the triangle)

$$r = \sqrt{bh/\pi}$$

11. Col A: $0.001^{-1} + 0.999^{-1}$

Col B: $0.002^{-1} + 0.998^{-1}$

Ans : A $A = 10^6/999 > 10^6/1996$

12. If the selling price of a product is 25% lesser than its list price and 40% greater than its cost price, then what is the list price of the product if the cost price = 30 ?

A. 52

B. 53

C. 56

& so on.....

Ans : C (56) $S.P = 1.4 \cdot 30 = 42$ $0.75 \cdot L.P = 42$ $L.P = 56$

13. If x and y are prime numbers greater than 10 then which of the following is an even integer?

A. $x^2 + xy$

B. $x^y + 2$

C. $xy + 2$

D. $2xy + xy$

Ans : A $x^2(\text{odd}) + x \cdot y(\text{odd}) = \text{odd} + \text{odd} = \text{even}$

14. If $z > 1$ & $z(x+y+z) = zx + zy + z$

Col A: z
Col B: 0

Ans: D

15. If $x < 2$ & $y < 3$

Col A: xy
Col B: 6

Ans: $B \times y < 2 \times 3 < 6$

16. The average salary of n employees is 32000, average salary of another different group of $n-1$ employees is 33000

Col A: The average salary of $2n-1$ employees
Col B: 32500

Ans : A The avg of the $2n-1$ employees (i.e. $n + n-1$) will be tending towards the value of n i.e 32000 i.e it will be < 32500 because $n > n-1$.

17. The range of 'p' numbers is 9.5 and the range for 'q' numbers is 21.5, what is the least range value when p and q are combined together?

Can anyone explain this

18. A series was given as 1, -3, 5, -7, 9, -11, 13, In this series odd numbers are negative integers. Find the sum of first 25 numbers in the series?

Ans : 1, 5, 9, 13, (13 terms) sum = $1 + (13-1) \times 4 = 49$
-3, -7, -11, (12 terms) sum = $-3 + (12-1) \times -4 = -47$

Total sum of 25 terms is 2

19. If n is an integer then

Col A: $(-1)^{6n+9}$
Col B: $(-1)^{2n-1}$

Ans : C $(-1)^{\text{odd}} = -1$ Hence $A=B$ for all integer values of n .

20. A trapezoid is given whose area is 12, length of it is given as 6 & height of it is given as 3. Find the perimeter of trapezoid?

Can anyone explain this?

0. Given N is a positive odd integer between 22 and 99. If the number in the tens digit is double the digit at the units place then the value of N ?
- A. $70 < 90$
 - B. $90 < 99$
 - C. $50 < 70$
 - D. $30 < 50$

2. find out the standard deviation of 2 set of numbers

3. find out area of five sided polygon given figure i cant remember the figure.

4. 13. Given $8 < 2x < 14$ and $9 < x+4 < 16$

Col A: x

Col B: 6

5. col a; $2^{-1} + 1/(2)^{-1}$

col b; $(3)^{-1} + 1/(3)^{-1}$

If $AB = BC$, $CI = IH$ & $DE = EF$ then

Col A: Area of Rectangle GDEF

Col B: Sum of areas of Rectangle ABCD & CIHE

2. What is the closest integer to $\sqrt{171}$?

3. If $a_n = n \{ (-1)^n - 1 \}$, and a_1, a_2, a_3, a_4, a_5 are the terms then what is the difference between greatest & least term?

4. No. of Members Least weight Range

20 members 100 29

21members 130 35

When two groups are joined, what is the median weight of the group?

5. Col A: $0.9999/0.9998$

Col B: $1.0002/1.0001$

6. If $(2x+7) < 13$ then

Col A: x^2

Col B: 9

7.

If $AC = x$, then find the perimeter of the figure?

1. Figure not showing

2. 13

3. 8

4. ?

5. A

6. D

7. Figure not showing

3. No. of Members Least weight Range

20 members 100 29

21members 130 35

When two groups are joined, what is the median weight of the group?

max wt. of 20 members 129

max wt. of 21 members 135

total no of members 41

therefore median wt--21st wt

20th wt = 129

21st wt= minimum of wt of 21 members

therefore 130.....(hope.u considering the fact that wt's have to be arranged in ascending order..)

6. If $(2x+7) < 13$ then

Col A: x^2

Col B: 9

[/quote]the ans to the above ques according to me is col B
coz wen u simplify the inequality
 $x < 3$
hence substituting the values u get col A < col B

After simplification we get that $x < 3$, and the questions does not state whether x is negative or positive, so we can take x to be either negative or positive.

If we take a positive value of x, say $x=2$ we get 4 after squaring which is less than 9, and we'll get Col-B as greater.

But if we take a negative value of x, say $x=-4$, after squaring we get 16, which is ofcourse greater than 9, so Col-A would be greater.

And hence, the answer would be D.

4. $a_5=5(-2)=-10$, $a_2=2(0)=0$... so the greatest difference is 10, not 8. Correct?

5. While technically accurate, if we limit ourselves to number of digital places give, they ColB is rounded to 1.0001, so they'd be equal. Do we have to worry about items such as this on the GRE?

1.

If 'D' is the mid point of EC and if the area of circle is 4π , then what is the area of the triangle ABC?

2. If $|2x + 49| < 13$ then

Col A: x^2

Col B: 9

3.

If the above polygon has all sides equal, then

Col A: AD

Col B: AF+FE

4. Given a line in xy-plane with slope $k = -1/2$ then

Col A: x-intercept

Col B: y-intercept

5. If the median of a seven number sequence is $2n+2$ then find the Arithmetic mean of that sequence?

6. Col A: $100!/99!$

Col B: $(100! - 99!) / 98!$

7. If $x - y = 1$ then

Col A: $x^2 - y^2$

Col B: 0

8.

As the shown in the figure, the diameter of the inner circle is 6ft and the difference in the radii of inner & outer circle is 1ft. Find the area of the shaded region?

9. Given that the room numbers of a floor are numbered from 101 to 550. If particular rooms are selected of numbers that start with 1, 2, 3 and lasts with 4, 5, 6 then in how many such ways the rooms can be selected?

(Given question is similar to this)

10.[img] http://www.drrajusgre.com/aug_img22.JPG[/img]

Given area of the shaded region of the circle (whose centre is 'o') as some (XXX) value and asked to find the radius of the smaller circle?

11. A parallelogram diagram is given whose length is 9 and breadth is 6 and the angle between the breadth and length is given as 'x' degrees (x degrees is greater than 90).

Col A: Area of the parallelogram

Col B: 50

12. Given 'k' and 'm' as two numbers whose LCM is 'km' & 'm' and 'n' are two numbers whose LCM is 'mn'. If $k, m, n > 0$ then

Col A: LCM of 'k' and 'n'

Col B: 'kn'

13. Given that the average salary of n employees is 32000, average salary of another different group of n-1 employees is 33000

Col A: The average salary of 2n-1 employees

Col B: 32500

14. A toy manufacturer company manufactures 20,000 toys and exports $\frac{3}{4}$ and $\frac{1}{10}$ and donates some (xxx) value for charitable trust. Find the number of toys left in the company?

& Few more previous database questions.....

2. If N is an odd and negative integer and it is a product of ten different integers.

Col A: no. of odd integers used in the product to get N

Col B: no. of negative integers used in the product to get N

2. Given a figure of combination of two triangles, in which first triangle contains 90, x, y degree angles and second triangle contains 90, z, w degrees. Which of the following conditions must be true?

I. $x - w = z - y$

II. $x + y = w$

III. $z = 90 - w$

A. I only

B. II only

C. I and III only

& so on....

3. Given a sequence -9, 10, -11, 12, -13, 14, -15..... Find the sum of first 40 integers in sequence?

4. If $n > 1$ then

Col A: $(-1)^{(4n-3)}$

Col B: $(-1)^{(4n-2)}$

5.

If all the seven circles are shaded like above then what is the area of unshaded region?

6. The standard deviation of the series 3, 7, 9, 13, 17 is?

7. Col A: $77!/78!$

Col B: $87!/88!$

8. If $2^n > 10^{15n}$ then which of the following options satisfies the condition

A. 30

B. 45

- C. 60
- D. 75

9. If x, y are the prime numbers greater than 10, then which of following must be even?

- A. $(x^2)(y^2)$
- B. $x^2 + x*y$
- C. $2*x*y + x$
- & so on....

10. Given a line in xy -plane with slope $k = -3$ & the points are $(2, k), (-3, m)$

Col A: $k-m$

Col B: -15

11. The approximate value of $((61.16)(.9^2))/\sqrt{401}$ is

- A. 5
- B. 4
- C. 3
- D. 2
- E. 1

12. Col A: $0.9999/0.9998$

Col B: $1.0002/1.0001$

13. There is a junior and senior team who has taken tests. The average of junior team members who have taken tests are 88 and the average of senior team members is 92

Col A: the average of senior and junior team

Col B: 90

14. When a number is divided by 12, the remainder is 5. What is the remainder when the square of that number is divided by 8?

15. If the selling price of a product is 25% lesser than its list price and 40% greater than its cost price, then what is the list price of the product if the cost price = 30 ?

16. Last year, $1/4$ of factory workers are architects. One year ago 60 workers newly joined in which 50 are architects and no one left the factory since last year and if now $1/3$ of factory workers are architects then find the total number of workers?

17. When 'w' is divided by 14, the remainder is zero. If 'w' is three lesser than its value and when divided by 15, its remainder is 14. What is the value of 'w'?

18. If RST is isosceles triangle with $RS = ST$ and P be a point on the side RT, then which of the following conditions must be true:

- i) $SP < ST$
- ii) $SP < RT$
- iii) $SP < PT$

- 1.A
- 2.figure is not given
- 3.20
- 4.B
- 5.If diameter of larger circle is taken as D then $\text{Area} = \frac{2}{9}(\pi)(D^2)$
- 6.Calculate using the formula
- 7.A
- 8.??
- 9.B
- 10.C
- 11.C
- 12.A
- 13.D
- 14.1

15.56
16.360
17.182 (it is better to verify from options)
18.B

i think 16 th one answer is 420..... $a/4+50=(a+60)/3$then $a=360$...so total is $a+60=360+60=420$

17. I don't think that the answer is 182

it says that w is three lesser than the value that when divided by 15 gives a remainder of 14.

If w equals 182, and that is three lesser then you would divide 15 by 185 which would give a remainder of 5.

I don't know what the answer would be...best to look at the choices.

Could someone try to verify i am reading right?

Thanks

answer for 8

the number that leaves a remainder 5 when divided by 12 will be of the form....17,29,41.....

now take a number say 17...square it $17*17=289$

divide it by 8leaves a rem 1....

let me know if u still can't get it.... 😊

1. If $a/b @ c = (a/b) / c$ then $(7/3) @ 4 = ?$

2. Col A: $100! / 99!$
Col B: $(100! - 99!) / 98!$

3. Given three points a, b, c. If a, b lie on the same line and if all these three points are at same distance between each other, then

- A. None of the points lie on the same plane.
- B. Only one point lies on the plane.
- C. Two points lie on the plane.
- D. More than two points lie on the plane.
- E. None of the above.

4. Given a series -9, 10, -11, 12, -13.80

Col A: sum of first 27 numbers
Col B: -22

5. If $100 < Y$

Col A: $2y$
Col B: 400

6.

As in above figure a, b and c are three angles & it is given that RQ is parallel to NO and PQ is parallel to MN.

Col A: a
Col B: b+c

1. 7/12
2. B
3. ??
4. C
5. D
6. C

Please tell me whether my answers are correct its urgent my exam is tomorrow and please anybody tell me how to solve 3rd ques.
thanks

1. 7/12
2. B
3. I think answer is D.
4. C
5. D
6. C

1. what percent of $\frac{1}{2}$ is $\frac{2}{3}$?

2. The company select for the job if persons get only 80% and higher. the probability of those selected is 0.65?
col a: the probability of selecting persons who have less than 80%
col b: 0.35

3. if $(n)an$ integer is defined as $(-1)^n$ which of the following is true given for integers a and b

1. $(a+b) = (a)*(b)$;
2. $(a+b) = (a)+(b)$;
3. $(a*b) = (a)*(b)$;

A none;
B both 1 and 2;
C 1, 2, 3;
D only 2

4. $r = \{50, 50, 50, 50, 50\}$
 $s = \{5, 10, 5, 0, 5\}$
col a: the standard deviation of r
col b: the standard deviation of s

5. 1. If $a_1 = 2$ and $a_{n+1} = (a_n - 1)^2$ where n, n+1, n-1 are suffixes. Find a_{17} ?

- A. 1
- B. -2
- C. 4
- D. 0
- E. -1

6. given $ab = b+1$, $a(b+c) = ab+1$

col a: c
col b: 1

7. [img] what is the perimeter of the given figure given four sides of each length 1 and given the opposite angle is 60

ans $4+\sqrt{3}$

8.2. Given a sequence 2, x, 7,..... which contains a constant such that the number is obtained by adding the previous number and the constant. Find x?





- A. $5/2$
- B. 5
- C. $9/2$
- D. -5

9.8. If $40 \cdot 75 \cdot 160 = 3 \cdot 4^m \cdot 5^k$

Col A: m

Col B: k

10 given to find the area of shaded region data given is semi circle with radius 1 and the angle of sector is 60 which forms an equilateral triangle

and solution is area of sector - area of equilateral triangle    

1] a

2] d

3] b

4] d

5] 48 ways

6] c

7] $10!$

8] $\pi/6 - \{\sqrt{3}/4\}$

9] 

10] c

11] a

12] 2

13] d

14] b

i think ans of first ques is D.

if u solve $x^{-1} = 2 / (1+y)$

u will get $y = 2x - 1$

which is true for:

$x=1$ and $y=1$; here $x=y$

$y=2$ and $x=3/2$; here $y > x$

so D is the correct answer.

ORKUT QUANT DATABASE (Till July 29th)

1. If $x, y > 0$ & $x^{-1} = 2 / (1+y)$, then

Col A: x

Col B: $y/2$

2. Given $-1 < r < t < 0$

Col A: $r+rt^2$
Col B: -1

3. For $7x+4 < 8$
Col A: The greatest possible value of x is
Col B: 6

4. If $x < 1$, then
Col A: $1/x$
Col B: $1/x^2$

5. Given five digits 1, 2, 3, 6 & 7. How many possible five digit even numbers can be formed without repetition?

6. Col A: 0.2% of 300
Col B: $1/500$ of 300

7. Given that $10! \cdot 8! = 8! \cdot x$ find x ?

8.
In the above semicircle shown with centre O, triangle AOB is equilateral and given $OB = 1$. Find the area of the shaded region?

9. If a square computer chip is increased in size by 0.1 mm, then its area increases by 0.75mm^2 . What is the original length?
A. 0.67
B. 0.68
C. 0.69
D. 0.70
E. 0.71

10. Given a series 1, 1, 1, 1, 1
Col A: S.D. of this series
Col B: 1

11. If a year has 365 days, then
Col A: Mean of the number of days per month
Col B: Median value of the months

12. Given a series of numbers $x, y, z, 0, 1, 1, 2, 3, 5, 8, \dots$. If every number in the series is sum of the preceding two numbers then what is value of x ?

13. If the legs of the right angle triangle are in the ratio of 3:4
Col A: The hypotenuse of the triangle
Col B: 10

14. If $K/m = m/r = 5/4$ & if $k=6$ then what are the possible values of r ?
A. $6 \cdot (5/4)^2$
B. $6 \cdot (4/5)^2$
C. $1/6 \cdot (5/4)^2$
&

1. If ' x ' is the unit digit of $11^{24} - 1$. What is the value of x ?

2. Given that there are 7 hosts in a party in which 3 are friends. If 2 members are to be selected in that, what is the probability that selected two members are friends?

3. Given that $|x - 1| < 2$ and $y < 0$
Col A: xy
Col B: 0

4. Col A: Standard deviation of a set of numbers 10,10,10,10 & 10
Col B: Standard deviation of 5, 10, 15, -5 & -10

5. Given stock price at end of June is x , stock price increase in July is 10% and increase in August is again 10%.
If September price = 70% of August price then
Col A: September price
Col B: $0.9x$

6.

Given that rectangle and square has same perimeter and the sides of rectangle are W , $W+4$.
If the area of rectangle is x then
Col A: Area of square
Col B: $x + 4$

7.

Given that the radius of smaller circle is " r " and radius of bigger circle is " $2r$ ". If a point has to be selected in the circle then what is the probability that the point lies in the shaded region?

8. Col A: 0.2% of 300
Col B: $1/500$ of 300

9. A man buys " W "kgs of dog food once in a week and " x "kgs of the food is given to each dog twice a day.
Col A: Number of dogs
Col B: $W/7x$

10. What percent of $1/2$ is $2/3$?

11.

(Here x , $2x$ & $4x$ are angles of the triangle)
Col A: Area of triangle ADB
Col B: Area of triangle BDC

[img]http://www.drrajusgre.com/quant_database.php[/img]
[img]http://www.drrajusgre.com/quant_database.php[/img]
[img]http://www.drrajusgre.com/quant_database.php[/img]

1. $x=0$
2. $1/7$
3. D.....since $x=-1$ or $x=3$
4. B
5. B
6. C
7. ??
8. C
9. C
10. 133.33%
11. no diagram.....???

All d best to ye guyz for ur GRE....juz dont take tension bout it.....

hi Adrian

Ans for 7 is $3/4$.

As probability of selecting a point in ring area = area of ring/Area of larger circle.

9. its B. as food consumes by one dog in week is $x*2*7=14x$ kg

$$\text{sep price} = .7 + .2 + x = .9 + x$$

any number less than 1 when multiplied with an integer the answer will be lesser than when added.

so the answer cannot be B and C
It has to be A

hello gomathi..

(6)th question is quite simple..

square and rectangle both have the same perimtr..dat means..

$$2(w+w+4)=4L \dots \text{where } L=\text{side of square.}$$

$$2(2w+4)=4L$$

$$4(w+2)=4L$$

therefore, $L=w+2$ =side of square!

$$\text{now area of rectangle} = x = w(w+4) = w^2 + 4w \dots (a)$$

$$\text{and area of square} = (w+2)^2 = w^2 + 4w + 4$$

dat means from (a)...we can say that..area of square = $x+4$.

1. If an integer is defined as $(-1)^n$ then which of the following is applicable for integers a and b ?
- i. $a+b = a*b$;
 - ii. $(a+b)=(a)+(b)$;
 - iii. $(a*b)=(a)*(b)$;

- A. Only i.
- B. Only ii.
- C. Both i and ii
- D. All the three
- E. None

2. Col A: $\sqrt{2/5}$
Col B: $1 - 3/5$

$$3. (14)^2 + (7)^2)^2 - ((14)^2 - (7)^2)^2 = ?$$

4. Given a circle inscribed in a square, the diagonal length of the square is given as $16\sqrt{2}$. Find the radius of the circle?

5. Given a series is 1,1,1,1,1

Col A: standard deviation of the given series
Col B: 1

6. Given that there are six teams in music Quiz and their respective scores are 31, 24, 14, 10, 43 & 47 and there are 5 judges for this quiz. What is the minimum number of teams which must get 7 or more than 7 score from any one of the judge?

7. Given $RST \neq 0$

Col A: $(-R)(-S)(-T)$

Col B: $(R)(-S)(-T)$

8. Given that 3 couples are to be seated on 6 seats. Find the number of ways to arrange them in such a way that both husband and wife sit together?

9. Given $8 < 2x < 14$ and $9 < x+4 < 16$

Col A: x

Col B: 6

10. If the probability of selecting 80% & higher percentage of persons for a job in a company is 0.65, then

Col A: The probability of selecting persons who have less than 80%

Col B: 0.35

11. If $R = \{50, 50, 50, 50, 50\}$ & $S = \{5, 10, 5, 0, 5\}$, then

Col A: The standard deviation of R

Col B: The standard deviation of S

12.1. If $a_1 = 2$ and $a_{n+1} = (a_n - 1)^2$ where $n, n+1, n-1$ are suffixes. Find a_{17} ?

A. 1

B. -2

C. 4

D. 0

E. -1

13. Given that $ab = b+1$, $a(b+c) = ab+1$

Col A: c

Col B: 1

14. Given a sequence 2, x , 7,..... which contains a constant such that the number is obtained by adding the previous number and the constant. Find x ?

A. $5/2$

B. 5

C. $9/2$

D. -5

15. If $40 \cdot 75 \cdot 160 = 3 \cdot 4^m \cdot 5^k$

Col A: m

Col B: k

16. If $|2x + 4| > 7$ then

Col A: x

Col B: 8

17. Given two boxes which contains same number of $1/3$ yellow, $1/3$ blue, $1/3$ red balls in both. If $1/3$ of yellow balls are to be shifted from 1st box to 2nd box, then in what fraction are the yellow balls present to the other colours balls in the 2nd box?

18. If $x < 50$ then $2 - 1/x = ?$

[/img]

- 1)b
- 2)a
- 3)38416
- 4)8

- 5)b
- 6) ?
- 7)b
- 8) c
- 9)d
- 10)b
- 11)d
- 12)c
- 13)b
- 14)b
- 15)b
- 16)1
- 17)d

please correct my answer if i am wrong[/list]

my ans are:

6. 3

10. i think its ans is C. pls explain hw did u get B.

11. I think its B as S.D of {50,50,50,50,50} is 0 and which is less than second column.

12.Its D. as $a_1=2$ $a_2=1$ $a_3=0$ $a_4=1$ $a_5=0$ so we can guess that term at odd value of n must be 0. thats why $a_{17}=0$

13. how did you get this?

14. Its C as the correct series is 2, $9/2$, 7. in which every next term is get my adding a constant to the previous term. constant is 2.5

15.its C $40*75*160=(3^1)*(4^4)*(5^4)$ so $m=k=4$

16. pls explain.

17 1:1

18 D

1. If an integer is defined as $(-1)^n$ then which of the following is applicable for integers a and b ?

- i. $a+b = a*b$;
- ii. $(a+b)=(a)+(b)$;
- iii. $(a*b)=(a)*(b)$;

- A. Only i.
- B. Only ii.
- C. Both i and ii
- D. All the three
- E. None

2. Col A: $\sqrt{2/5}$

Col B: $1- 3/5$

3. $(14)^2 + (7)^2)^2 - ((14)^2 - (7)^2)^2 = ?$

4. Given a circle inscribed in a square, the diagonal length of the square is given as $16\sqrt{2}$. Find the radius of the circle?

5. Given a series is 1,1,1,1,1

Col A: standard deviation of the given series

Col B: 1

6. Given that there are six teams in music Quiz and their respective scores are 31, 24, 14, 10, 43 & 47 and there are 5 judges for this quiz. What is the minimum number of teams which must get 7 or more than 7 score from any one of the judge?

7. Given $RST \neq 0$

Col A: $(-R)(-S)(-T)$

Col B: $(R)(-S)(-T)$

8. Given that 3 couples are to be seated on 6 seats. Find the number of ways to arrange them in such a way that both husband and wife sit together?

9. Given $8 < 2x < 14$ and $9 < x+4 < 16$

Col A: x

Col B: 6

10. If the probability of selecting 80% & higher percentage of persons for a job in a company is 0.65, then

Col A: The probability of selecting persons who have less than 80%

Col B: 0.35

11. If $R = \{50, 50, 50, 50, 50\}$ & $S = \{5, 10, 5, 0, 5\}$, then

Col A: The standard deviation of R

Col B: The standard deviation of S

12.1. If $a_1 = 2$ and $a_{n+1} = (a_n - 1)^2$ where n, n+1, n-1 are suffixes. Find a_{17} ?

A. 1

B. -2

C. 4

D. 0

E. -1

13. Given that $ab = b+1$, $a(b+c) = ab+1$

Col A: c

Col B: 1

14. Given a sequence 2, x, 7,..... which contains a constant such that the number is obtained by adding the previous number and the constant. Find x?

A. $\frac{5}{2}$

B. 5

C. $\frac{9}{2}$

D. -5

15. If $40 \cdot 75 \cdot 160 = 3 \cdot 4^m \cdot 5^k$

Col A: m

Col B: k

16. If $|2x + 4| > 7$ then

Col A: x



Col B: 8

17. Given two boxes which contains same number of $\frac{1}{3}$ yellow, $\frac{1}{3}$ blue, $\frac{1}{3}$ red balls in both. If $\frac{1}{3}$ of yellow balls are to be shifted from 1st box to 2nd box, then in what fraction are the yellow balls present to the other colours balls in the 2nd box?

18. If $x < 50$ then $2 - \frac{1}{x} = ?$

& Many previous dates database questions appeared.

hey i thing this is the correct answer for this if am wrong pls let me know

- 1)b
- 2)a
- 3)38416
- 4)8
- 5)b
- 6)b
- 7)b
- 8>b
- 9)d
- 10)d
- 11)b
- 12)d
- 13)c
- 14)c
- 15)c
- 16)d
- 17)1:1
- 18¹d

Sep2

- 1.A
- 2.9
- 3.I suppose it is B
- Col A: $4c^3 * 4c^4$
- Col B: $4c^2 * 4c^2$
- 4.?
- 5.C
- 6.?
- 7.B
- 8. $10^{(-10)}$
- 9.4

Sep3

- 1. I believe answer is $\frac{1}{19}$
- $\frac{10}{20c^2}$
- 2.120
- 3.?
- 4.D
- 5.90
- 6.8
- 7. $2\sqrt{3X}$

- 8.A
 9.8K (Volume of cone = $\pi r^2 h$)
 10.?

Sep4

1. I suppose it is B
 Col A: $4c^3 \cdot 4c^4$
 Col B: $4c^2 \cdot 4c^2$
 2. 45°
 3. It can be between 10,000-200000
 4. B
 5. 74
 6. ?
 7. D
 8. A
 9. ?
 10. C

1.

If the radius of the larger circle is twice the radius of smaller circle, then find how many times is the shaded region greater than unshaded region?

2. The Value of $0.00004/40000$ is.....

3. If $x < 0$, then

Col A: $|x|$

Col B: $-x$

4. Col A: $0.01/1 - 0.01$

Col B: $0.1/1 - 0.1$

5. If x is a negative number, then

Col A: $\text{mod } x + \text{mod}(-2)$

Col B: $\text{mod}(x-2)$

6. If $6 < 2x < 12$ and $4 < x < 7$, then

Col A: x

Col B: 5

7. The coordinates ends of base of a square are given, and were asked to find the side of the square?

(Question is similar to this)

8. Given one coordinate of the edge of a square is $(3/2, 3/2)$. What is the

equation of the diagonal of a square?

9. Col A: $10^{12} + 2^{12}$

Col B: 12^{12}

10. If the area of one square is 44% more than that of other square, then by what percentage the side is differed?

11. There is a parabola whose equation was $y = 2x - x^2$. The parabola was drawn such that, the curvy part was in the first quadrant.. and now if (s, t) is any point between positive x-axis and the curve

Col A: t

Col B: $2s - s^2$

12. Given:

Value (in cents) - Quantity

5 - x

10 - y

15 - z

If the number of 5 cents coins were equal to number of 10 cents coins and if the total

number of coins in the bag were 17 and their total value was 258 cents then how would you

calculate the number of 5 cent coins?

answers to Sept 11 thread :

1.4

2. $(10)^{-9}$

3.C

4.B

5.C

6.D

7. Use distance formula

8. $y = x$

9.B

10. 20%

11.B

12.?

if there are any issues please let me know.

for the 10 th one

just assume some value for side let it be 10

so area is 100

44% of 100 is 44

so new area is $44 + 100 = 144$

so side of new area is $\sqrt{144} = 12$

$12/10 * 100 = 120$ that is 100% + 20% new one

so 20 %

hope u understand if i am not confusing u...!!

hey...answer to question 1

assume the radius of the smaller circle R then its area is πR^2

now the radius of the bigger circle is double the smaller hence $2R$

therefore its area will be $4 * \pi R^2$

therefore area of the shaded region will be $= 4 * \pi R^2 - \pi R^2 = 3 * \pi R^2$

therefore area of the shaded region is 3 times that of the unshaded region..

i hope u got ??

Actually the question is only complete if given with relevant options. Or else we can't answer it. Because as we know

infinite number of straight lines can be drawn through a single point. So the equation of the diagonal can also be $2x-3y+1.5=0$ or $2x+3y-7.5=0$ or $5x-7y+3=0$ or etc . . . One can come up with a lot of

equations like these that satisfies the point $(3/2, 3/2)$. So the only way to solve the problem is substitute the value of X and Y in the equations given in the options and check which one satisfies the point. That will be the answer.

If two options are satisfying the point then sue ETS. 😊

Quants:

1. If 'x' is a positive integer.

Col A: $(x)^{(x)^x}$

Col B: $(x)^x$

2. Given a cuboid whose faces are painted red and the cuboid is cut vertically into 27 pieces. If the pieces are taken out after cutting vertically then how many of these 27 pieces had red color face?

3. For a product 'M' if the selling price is increased by 25% and for a product 'N' if selling price is decreased by 25%.

Col A: Cost price of product M

Col B: Cost price of product N

4. Col A: Standard Deviation of 4, 5, 6, 7, 8

Col B: Standard Deviation of 33, 33, 34, 34, 35, 35

5. Given that $-1 > x > 0$ and assume that $x \neq 0$ which of the following is true?

A. $x^3 < x^2 < x$

B. $x^2 < x < x^3$

C. $x < x^2 < x^3$

D. $x < x^3 < x^2$

6. Given a triangle ABC, and the angle opposite to base(BC) is 54degrees and the other two angles are given x degrees and y degrees. If a line cuts this triangle horizontally... let us assume that the line cuts the side AB at point 'D' and BC at point 'E'. (Note: This line which cuts this triangle is some what slanting i.e the point 'D' is not the mid point of the line AB). such that a triangle ADE is formed and the angle D($\angle ADE$) is given as v degrees and the angle E($\angle AED$) is given as w degrees.

Col A: $x + y$

Col B: $v + w$

7. In the following 8 digit number..... "35687_47". What should be the value in the hundredth place such that the number should be divisible by 3?

Quants:

1. Which is the greatest among the following

- A. $(0.3)^2$
- B. $(0.03)^2$
- C. $(3/10)^3$
- D. $(3/100)^3$

2. If x is a positive number

Col A: $x^{(x^x)}$

Col B: $(x^x)^x$

3. If $-1 < x < 0$ then

Col A: $(1/x)^2$

Col B: x^2

4. Given a cylinder of radius 5 and height 8. Find the largest line that can be drawn joining any two points in the cylinder?

- A. $2\sqrt{41}$
 - B. $\sqrt{81}$
 - C. $\sqrt{154}$
- and so on....

5. Given a rectangular box with sides 5inches, 6inches, 10inches and has weight 17kgs. What is its density in kg/cubic feet?

6. Given Principal amount as P , rate of interest as R , and the amount increases from 1995 to 2000 and 2000 to 2005 each time by $r\%$, so that the total amount was $(7/5)P$ at the end of 2 yrs .

Col A : R

Col B: 20

7. Given a triangle ABC, in which a square is inscribed. If the base of the triangle is 4 times the side of the square, then

Col A: The altitude CD (D is the mid point of AB)

Col B: Side of the square

8. Col A: Standard Deviation of 23, 24, 25, 26, 26, 26

Col B: Standard Deviation of 25, 26, 27, 28, 29, 30

9. If the circumference of a circle 'C' is equal to perimeter of a square 'S' then

Col A: area of a square 'S'

Col B: area of circle 'C'

1. There are 25 positive integers and each integer is a multiple of m . Highest of these integers is 250.

Col A: m

Col B: 5

Quant:

1. Given an series 1, 2, 2, 3, 3, 3, 4, 4, 4, 4..... if this continues then what will be the value of the 100th term ?

2. $100 < a < b < 1000$

Col A: $1/a - 1/b$

Col B: $1/100 - 1/1000$

3. Given two concentric circles, one with radius 2 and other with radius 5. If a tangent is drawn to the circle of radius 2 and that tangent touches the circle of radius 5 at points R and T. Find the distance between R and T?

4. A rectangle was given. Length (base) (labelled as MS) = 16, Width (labelled as SR) = 5. If a point P is taken on the base randomly, What is the probability that length of PR is less than 13.

5. Given an equation of parabola, a point P was marked on the parabola in the 1st quadrant at (9,k). Find the distance between the point P and the point where it touches the Y axis.(Question is something like this)

6. Equations of two lines were given and distance was asked between points where those lines intersected y and x axis. (Question is similar to this.... with equations given)

7. Given that the sales of store A increases from 20% to 24% and sales of store B decreases from 24% to 20%

Col A: percentage increase in sales of store A

Col B: percentage decrease insales of store B

8. If $(a^3)/(b^3) = -1$ then

What is the value of $(a^{-1})+(b^{-1}) =$

9. Given that SRT is an isosceles triangle with $SR=ST$. P is a point on RT, with a different distance from both R and T.

Which one of the following must be true?

i) $SP < SR$

ii) $SP > RP$

iii) $SP < RT$

Quants:

1. A group can charter a particular aircraft at a fixed total cost.If 36 people

charter aircraft rather than 40, loss per person is 12\$. What is cost per person if 40 people charter it?

2. In a triangle the three angles are given as X,X,Y. and the avg of two angles is 65, then what is the possible value of Y in the below options?

A. 60

B. 65

C. 70

D. 75

E. 80

3. A square was given and another square was formed by joining mid points of the square. Perimeter of larger square was given X.

Col a: perimeter of smaller square

Col b: $X/2$

4. Given a cylinder having volume V. There is one more cylinder that had radius and height both twice of that of the given cylinder, so what is the volume of 2nd cylinder in terms of V?

5. There are five persons A, B, C, D, E. What are the possible combinations they are seated provided C and D always sit nearby?

6. If the volume of a cube is 1 cubic centimeter, then the distance from any vertex to the centre point inside the cube is

- A) $1/2$
- B) $1/\sqrt{2}$
- C) $\sqrt{2}$
- D) $\sqrt{3}/2$

7. If x and x+2 are both factors of y then which one is greater?

Col a: $x(x+2)$

Col b: y

[quote="drrajus faculty"][b]Quants:

1. A group can charter a particular aircraft at a fixed total cost. If 36 people charter aircraft rather than 40, loss per person is 12\$. What is cost per person if 40 people charter it?

2. In a triangle the three angles are given as X,X,Y. and the avg of two angles is 65, then what is the possible value of Y in the below options?

- A. 60
- B. 65
- C. 70
- D. 75
- E. 80

3. A square was given and another square was formed by joining mid points of the square. Perimeter of larger square was given X.

Col a: perimeter of smaller square

Col b: $X/2$

4. Given a cylinder having volume V. There is one more cylinder that had radius and height both twice of that of the given cylinder, so what is the volume of 2nd cylinder in terms of V?

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- A) $1/2$
- B) $1/\sqrt{2}$
- C) $\sqrt{2}$
- D) $\sqrt{3}/2$

7. If x and $x+2$ are both factors of y then which one is greater?

Col a: $x(x+2)$

Col b: $y/[b] [/quote]$

Quants:

1. Given a cuboid whose faces are painted red and the cuboid is cut vertically into 27 pieces. If the pieces are taken out after cutting vertically then how many of these 27 pieces had red color face?

2. If an amount of 10000 for an year with $y\%$ rate of interest yield 'm' amount of interest in dollars, then an amount of 'x' with $2r\%$ of interest would yeild ' $m/2$ ' amount interest in dollars.

Col A: x

Col B: 5000

3. Balls are distributed one at a time, into six baskets. The 1st ball goes into basket one, the 2nd into basket two and so on. If this is repeated then 74th ball goes into which basket?

- A. 4
- B. 3
- C. 2..... etc.

4. There are 75 numbers in a row and the n th term of a series is $2n+5$. Find the median of the series when the numbers are from 1 to 75.

Col A: Median term

Col B: 81

5. If $xy < 36$.

col A: $(x+1)(y+1)$

col B: 49

6. If $S = \{15, 10, 11, x \text{ and } y\}$ and $x + y = 11$ then which is the least positive integer in the set S?

- a. 2
- b. 3
- c. 9
- so on....

7. If A, B, C, D, E are arranged in a line. Find the total number of arrangements such that B and C lie side by side ?

Quants:

1. Given that xy is not equal to 0

Col A: $1/x^3 + 1/y^3$

Col B: $1/(x+y)^3$

2. The profit made by a company is given by P and the tax the company has to pay to the government is \$6000 + $r\%$ of the profit over \$250000. If a company has to pay 3% of its profit as tax, what is the profit made by the company?

3. If $y = ax + b$ and y intercept is -2, Find x intercept?

4. Given a line $Y = X$ and there is another line L which doesn't intersect the first one anywhere (Questions is something like this and was asked to compare following)

Col A: Slope of that line L

Col B: 2

5. If $p+6, q+6, r+6$ has a standard Deviation ' S ' then what will be the Standard Deviation for p, q, r ?

a. $6S+6$

b. $8S+18$

c. $6S$

d. none

6. There are 20 coloured pencils in a pencil stand. The probability of choosing a yellow pencil is 0.8. There are 6 yellow pencils without an eraser. What is the probability that a yellow pencil chosen is that which has an eraser?

7. A group of 4 pumps are filling a tank. Each of the 3 smaller pumps works at $2/3$ rd the rate of the largest pump. If all 4 pumps work at the same time, they should fill the tank in what fraction of the time.... that it would have taken the largest pump if it operated alone?

Quants:

1. If a set S consisting of 9 even consecutive integers, how many are divisible by 3.

2. Given that the sales of store A increases from 20% to 24% and sales of store B decreases from 24% to 20%

Col A: percentage increase in sales of store A

Col B: percentage decrease in sales of store B

3. If $x = 3$

Col A: $x^{(x^x)}$

Col B: $(x^x)^x$

4. Given a polygon which is marked $7t$ all the sides

col a: perimeter of the polygon

col b: $7t$

5. Which cannot be the sum of 3 or more consecutive integers

A. 1

- B. 2
- C. 3
- D. 4

6. If $2^{-5} < x < 2^{-6}$

Col a : $4x$

Col B : $1/12$

7. A person buys two items of the same kind. If he sells one at 25% of profit and other at 25% of loss then what is the price of the item?(Question is something like this)

8. Given $a_1, a_2, a_3, \dots, a_n$, is a series such that $a_n = a_n - a(n-1)$, for $2 > n$. If $a_1 = -5$, $a_2 = 4$, find the sum of first 50 numbers of the series?

Quants:

1. There are five numbers in a series, 19, 22, 25, 26, 28..each number is increased by k so that the new mean is 28.5, what is the new median?

2. A parabola is given and was intersecting y-axis at one point given, $y = x^2 - 3$, and a point in xy-plane is $P(2, k)$. What is the distance between the point P and that of intersecting on y-axis?

- A. 6
- B. 7
- C. $2\sqrt{5}$
- D. $3\sqrt{3}$

3. If a person used to get a 30% discount on movie tickets. When the price of the movie ticket increased by 50%, the amount of discount in dollars remained the same. What is his discount with the new Ticket price in percent terms?

4. If $-1 < x < 0$

Col A: $\text{mod}(x - 1/2)$

Col B: $\text{mod}(-x - 1/2)$

5. A number x leaves remainder 7 when divided by 11
when divided by 5 leaves remainder 1

Col a: least possible value of x

Col b: 40

6. Given there are 50 numbers, if the average of the first 25 numbers is 16, next 10

numbers is 15 and the last set is 20. What is the average of the entire set ?

Quants:

1. Col A: $(1/9)/100$

Col B: $1/1000 + ((1/9)/1000)$

2. Which cannot be the sum of 3 or more consecutive integers

- A. 1
- B. 2
- C. 3
- D. 4

3. Given that 6 computers of type A, 12 computers of type B are in an office, if 25% of the computers are

connected to color printers and $33\frac{1}{3}\%$ of the computers are connected to [color printers](#) type B then how many type A computers are connected to colour printers?

4. Given two circles of radius 3 and 5, if a line tangent to the smaller circle passes through the bigger circle at points Q and P. What is the length of PQ?

5. If the sum of a number and its reciprocal is less than 2 then what is the number?

- A. $\frac{1}{3}$
- B. 2
- C. $\frac{4}{3}$
- D. $\frac{3}{2}$
- E. none of the above

6. If $xy \neq 0$

Col a: x^y

Col b: y^x

7. In the xy coordinate axis, two line equations P and Q were given, if these make two points on PQ then distance of PQ is? (Question is something like this)

8. Given two line equations

Col a: slope of line 1

Col b: slope of line 2

9. A rectangle ABCD with sides $AB = 16$, $BC = 5$. If a point 'P' is plotted on the side CD of the rectangle then what is the probability that the length of the BP is 13?

Quant:

1. If standard deviation of 'p' number of people is 21.5 and standard deviation of 'q' number of people is 9 then what is that least possible standard deviation value when both p and q are added?

2. If $p_1 = \{2, 3, 4, 5, 6\}$ and $p_2 = \{11, 12, 13, 14, 15\}$ then how many unique answers are possible for $p_1 + p_2$?

3. Given perimeter of circle as 8π . If the area of a square is equal to area of this circle. Find the side of the square?

4. How many of the following 2, 4, -7, $\sqrt{19}$ & 8 have their square 4 more than the multiples of 5?

- A. 0

- B. 1
- C. 2
- D. 3
- E. 4

5. If A_1, A_2, A_3, A_4 & A_5 belongs to a series such that $A_n = n \{ (-1)^n - 1 \}$, then what will be the difference of the largest and the smallest term?

- A. 4
- B. 6
- C. 8
- D. 10
- E. 12

6. If $R_1 = -3, -2, -1$

$R_2 = 1, 2, 3$ &

$R_3 = -3, -2, -1, 1, 2, 3$

and if s_1, s_2 and s_3 are standard deviations of R_1, R_2 and R_3 then which of the following is true?

- i. $s_1 < s_2$
- ii. $s_2 < 0$
- iii. $s_3 = 0$

- A. NONE
- B. i only
- C. ii only
- D. iii only
- E. all three

7. In a class of certain number of students, if $1/2$ of the students takes maths as their major, $2/3$ takes physics as their major & $1/3$ takes both maths and physics as their majors and if 40 students didn't take any of maths or physics subjects as their major then what is the total number of students in the class?

8. If $x < y$ then

Col A: $x^2 + x + 1$

Col B: $y^2 + y + 1$

9. Given $A = \{ \text{set of odd integers less than } 100 \}$

$B = \{ \text{set of even integers less than } 5 \}$

$C = \{ \text{set which include product of both sets A and B} \}$

Col A: no. of integers in set C

Col B: 100

10. If Average of $a, b, c, -5, -15$ is 's' and average of $a, b, c, 5, 15$ is 't' then what is the value of $(s-t)$?

11. What is the remainder when $(5^{20}) - (5^{18})$ is divided by 4 ?

12. Given a line in xy plane with slope $k = -1/2$

Col A: x-intercept

Col B: y-intercept

13. There is a semi circle and person A takes 2min to walk around the semicircle path, and B takes 1 minute to walk along the diameter

Col A: Average speed of A

CoL B: Average speed of B

Admin,
drrajusgre.com

- (1) 12.5..?
- (2) 10
- (3) $4\sqrt{\pi}$ or 12.571
- (4) C=2
- (5) E
- (6) A
- (7) 240
- (8) D
- (9) A..?
- (10) 8
- (11) 0
- (12) A
- (13) B

1. can ny1 explain this to me plz.....
 2. 9
 3. $4\sqrt{\pi}$
 4. E=4
 5. C=8....A1=-2 and a5=-10....therefore difference comes out to be 8...
 6. A
 7. 240
 8. D
 9. C
 - 10.-8
 11. 0
 12. ??
 - 13.B

All d best to ye guyz for ur GRE....juz dont take tension bout it.....

1. Given Set A = {5,6,7,8,9} &
Set B = {26,27,28,29,30}
If one element is choosen from A say 'X' and one from B say 'Y' then how many different values of x+y are possible?
2. Col A: $100!/99!$
Col B: $(100! - 99!) / 98!$
3. Given three points A B and C are lying on a circle such that BC is the diameter and BC=20 while AB = 10 then

angle B = ?

- A. 0
- B. 30
- C. 45
- D. 60
- E. 90

4. If N and M are the multiple of 2 which are not divisible by 4 then what will be the remainder when N + M will be divided by 4

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4

5. Given a series x, $2x+2$, $3x+4$, $4x+6$ & $5x+8$

Col A: Mean of above series

Col B: Median of above series.

solution are:

- 1. 9
- 2. B
- 3. 30
- 4. 0
- 5. D

members pls confirm.

Hey guyz.....jus gave my GRE today.....

got 1200.....quants-800 verbal-400

juz keep visiting this site for quants guyz.....swear to god that about 5-6 sums came previous threads....

thanks to all the faculty at DR Rajus.....u guyz really helped....

August 12th GRE Thread

1. $r < s < t$, $x < y$

when arranged in increasing order, which of these 5 numbers cannot be 2nd

ans: t

2. 1 container can contain maximum 3 cubic feet of milk. How many cubic yards of milk can be contained in 100 containers.

3. There are 2 parallel lines given p and q. There is another line L given such that line l cuts line p at the point A and line q at point C. Another line m intersects line L at point A and further cuts line q at point B

Col A: AB

Col B: AC

Ans: D

4. An item can be made by selecting a combination of 2 subitems. The first sub item can be selected in 3 out of 5 ways.

The second sub item can be selected in 4 out of 5 ways. What are the maximum number of combinations available.

Ans :25

5.

Col A: $100! / 99!$

Col B: $(100! - 99!) / 98!$

6. A sequence is given to you. 1,-3,5,-7.....

The nth number is represented by $\{(-1)^{(n+1)}\} * (2n-1)$

What is the sum of the first 25 numbers.

7. There was another sum where they had given us 5 different lines as the options, and asked us which line has the greatest slope.

Ans: $-(y \text{ co-eff})/(x\text{-coeff})$

8. Given Set A = {5,6,7,8,9} &

Set B = {26,27,28,29,30}

If one element is chosen from A say 'X' and one from B say 'Y' then how many different values of $x+y$ are possible?

Ans: 9

9. Given a line in xy plane with slope $k = -1/2$

Col A: x-intercept

Col B: y-intercept


Ans: B

10. OK, there was a diagram here.....gunna try n explain As well as possible. Its a co-ordinate geometry sum.

Imagine the x and y axis. Theres a line drawn such that it cuts the y-axis at $B(0,b)$ and the x-axis at $A(a,0)$. Now there is another line drawn parallel to the x-axis such that its distance from point B is K. It cuts the line AB at point (x,y) . You have to find the value of x and y in terms of a,b,k.

Ans: $x=ak/b$, $y=b-k$.

This is all i can remember.....there were 2 graphs as usual.....think of anythin else.....will post it later.

All d best Guyz

All d best to ye guyz for ur GRE....juz dont take tension bout it.....

Quant:

1. If $1 < xy < 4$ and $1 < y < 2$, then

Col A: x

Col B: y

2. If the speed of a vehicle is $x/6$ miles for 'y'secs then the speed for Z miles is?

3. A set contains 2 numbers and all the intergers in the set are multiples of an interger M . If the highest integer in the set is 250, then

Col A: m

Col B: 5

4. Given Set A = { 5, 6, 7, 8, 9} & Set B = { 26, 27, 28, 29, 30} . If one element is chosen from Set A say 'X' and one from Set B say 'Y' then

how many different values of $x+y$ are possible?

5. Col A: 0.9999/0.9998

COIB: 1.0002/1.0003

6. If x and y are prime numbers greater than 10 then which of the following is an even integer?

A. $x^2 + y^2$

B. $x^2y + 2$

C. $xy + 2$

D. $2xy + xy$

7. When x is divided by 12, it gives a remainder of 5. So what is the remainder if x^2 is divided by 9?

8. Col A: $(1/.001) + 1/.999$

Col B: $(1/.002) + 1/.998$

9. Col A: $(-2)^{-3}$

Col B: $(-4)^{-3}$

10. If x and y are prime numbers greater than 10 which of the following is an even integer

A. x^2y^2

B. $x^y + 2$

C. $xy + 2$

D. $2xy + xy$

11. If there are 33 balls arranged in 7 boxes which of the following is true.

(i) at least one box has more than 5

(ii) there are more than one boxes with 4

(iii) there is at least one box empty

A. i only

B. ii only

C. i and ii

D. i and iii

12. There are 5 terms in a series a_1, a_2, a_3, a_4, a_5 and a_n is given as $a_n = n\{(-1)^{n-1}\}$. Find the difference between the greatest and smallest term?

13. If an amount of 2000\$ is given for annual interest at 'r'% rate and if 150\$ is received as an interest for 1 year then find the value of r ?

14. If $(9)^{2x} \cdot 3^y = 81^y$ then find x in terms of y ?

15. If $S = (1, 2, 3, 4, 5)$ & $T = (1, 2, 3, 4, 5)$ and if 'P' is a product of 'S' and 'T' then how many values of 'P' are possible?

& Few Previous Database Questions

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1.D

2. z/y

3.D

4.9

5.A

6.?

7.?

8.A

9.B

10.?

11.None(?...)

12.9
13.7.5
14. $x=3y/4$
15.14

[quote="arvind_4"]1.D
2. z/y
3.D
4.9
5.A
6.?
7.?
8.A
9.B
10.?
11.None(?...)
12.9
13.7.5
14. $x=3y/4$
15.14

Quant:

1. There are 1 badger and 1 panderer. If each badger has 6 flavors and each panderer has 3 flavors, then what is the total number of ways of selecting 4 flavors from badger and 1 flavor from panderer?

2. Given 'A' works 25mins to produce 1 ton of oil and 'B' works 30mins to produce 1 ton of oil, If they work simultaneously, then in how many hours they can produce 15 tons of oil?

3. $1/2(10^6) = ??$
A. $5 \cdot 10^5$
& four other options were given.

4. Col A: $(0.02)^2$
Col B: $(-0.05)^2$

5. If $-10 \leq X \leq 6$, then what is the maximum possible greatest value of $-X^2 + X^4$?

6. If length of the triangle is 16 and perimeter is 40, then what is the area of the rectangle?

7. If 'A' is three times of 'B' and 'B' is five times of 'C', then how many times is 'A' when compared to 'C'?
A.15
B.14x
C.15x
D.10x
& so on....

8. If the arithmetic mean of 4 boys salary is X and average of 3 girls salary is y, then
Col A: Mean of 7 members salary
Col B: $(x+y)/2$

9. Given that there are 'x' girls and boys are 4 more than girls, if the probability of girls from the total (G+B) is $\frac{3}{7}$, then totally how many girls are there?

10. In a line, if x-intercept is given as 2 and Y-intercept is given as 8, then which of the following below is true?

- A. y-intercept is always 4 times of x-intercept.
 - B. y-intercept is always 6 more than x-intercept.
- & 3 more options were given

11. A graph is given, in that 2 lines are drawn. Line L1 is drawn from left-right downward and line L2 is drawn left-right upward.

Col A: Slope of line L1

Col B: Slope of line L2

(Given question is something like this)

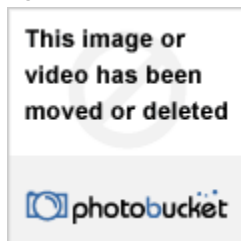
12. There are 4 members and each of their salary is 'h' and the mean of their salary is 'x' dollars & there are other 3 members each of their salary is 2h and the mean of their salary is 'y' dollars.

Col A: Standard Deviation of salary of 4 members

Col B: Standard Deviation of salary of all 7 members

(Given question is similar to this).

13.

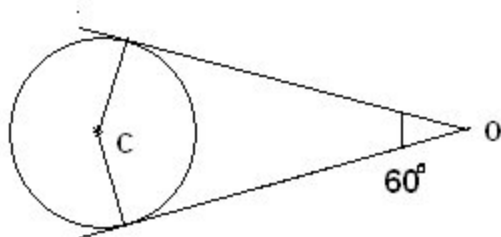


Here L1 & L2 are parallel. Area of triangles ABC & area of triangle DEF are given (some value).

Col A: Length of DG

Col B: Length of CF

14.



Here 'C' is the centre and those lines are tangents to the circle which meets at 'O'. If the angle it makes is 60° (or 30° -- not sure), then what is the circumference of the circle?

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ANS:

- 1--->45
- 2--->3and1/2 hrs
- 3--->A
- 4--->B
- 5--->9900
- 6--->64
- 7--->A
- 8--->D
- 9--->12
- 10--->A
- 11--->DATA...INSUFFICIENT
- 12--->B
- 13--->D
- 14---> ?

...San

hi,
da answers seem 2 b correct but can u plz explain how u got #2 and #5. Plz check #8. I thnk it is option A. Plz chek.

When is ur exam and where?? plz let me know.
thanz

5. If $-10 \leq X \leq 6$, then what is the maximum possible greatest value of $-X^2 + X^4$?

$$X^4 - X^2 \\ = X^2(X^2 - 1)$$

since X has even pow let's take :

$$X = -10 \text{ (to get max value)}$$

$$= (-10)^2(100 - 1)$$

$$= 100(99)$$

$$= 9900$$

...San

8. If the arithmetic mean of 4 boys salary is X and average of 3 girls salary is y, then

Col A: Mean of 7 members salary

Col B: $(x+y)/2$

The arithmetic mean of 4 boys salary is X. and average of 3 girls salary is y.

col A: mean of 7 members salary

col B: $(x+y)/2$

mean of 4 boys sal is X \Rightarrow total boys sal is 4X

similarly total girls sal is 3Y

their total sal $= 4X + 3Y$ (for 7 members)

so their mean is $(4X + 3Y)/7$

BUT we don't know their individual sal's so ans is D

i think so....correct me if i'm wrong 🚫

mine is on DEC 24th in hyd and abt ur's ?

...San

ans 4 circle wala question

<120*

coz line drawn 4m tangent to centre makes 90°

Q11- Ans " B"

Important

- The slope of line, that goes up as you move from left to right, is positive.
- The slope of line, that goes down as you move from left to right, is negative.

so slope of line L2 is positive and slope of L1 is negative

(Refer Barron's GRE key fact N4)

What is the meaning of length of the triangle. I think Question has been asked in wrong way.

kindly correct me if I am wrong.

From
Pankesh Patel

Quant:

1. Given three series

I: $x, 2x, 3x, 4x, 5x$

II: $x, x+1, x+2, x+3$

III: $1/x, 1/(x+1), 1/(x+2), 1/(x+3)$

Which of the series has same mean and median?

2. In a class of 20 students, one half of the students are boys, if a teacher has to select 7 students and the first 6 are girls

Col a: What is the probability that the 7th student is a girl
Col b: $2/7$

3. There was a ladder given. The ladder is of length 5 and it is displaced i.e. slanted downwards such that it falls 'x' mts in height and its horizontal length increases by 'y' mts.

Col A: x

Col B: y

4. If the probability of not raining tomorrow is 0.56, then

Col A: Probability of not raining tomorrow, when temperature is above 85 centigrade
Col B: 0.58

5. Col A: $10! + 9!$
Col B: $10(9!)$

6. If x & y are the integers between 13 & 29, then for $5+x/7+y$ how many sets of values of x & y for the given expression will be in same ratio?

7. If $x/x-1 = x-2/x+1$
Col A: x
Col B: $2/3$

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- 1) I & II
- 2) C
- 3) ?
- 4) B
- 5) A
- 6) ?
- 7) B

if any mistakes plz correct me...

shiva plz tell me how u did #2 and #4.
Da answer 2 # 3 is D i thnk.
plz tell me da way 2 do da probs

$b=10$ $g=10$

after selecting 6 girls only 4 girls remaining.....also total no: os students is 10 boys+ 4 girls

so req prob = $4/(10+4)=4/14=2/7$

- 3.C
- 4.A
- 5.A
- 6. ?
- 7.B

I think for Ladder Example , ladder length is 5 , we have to find x & y .

we Can't specify Relation between x & y .

it might be $x = 3$ & $y = 4$.
or

$x = 4$ & $y = 3$.

so the answer Should be Can't specified means (D).

From
Pankesh Patel

Here , Probability of not raining is given which is 0.56.
So the probability of raining is $(1-0.56) = 0.44$

So , $0.44 < 0.56$, so the Answer is B.

Here Temperature is above 85 is independent event .

kindly correct me if I am wrong.

From
Pankesh Patel

Here Ratio will be same When x & y are Same.

so Number between 13 & 29 is ----> $29 - 13 = 15$.

Total possible pair is 15.

Correct me If I am Wrong

From
Pankesh Patel

in problem colA: he has given that Probability of not raining , but u r talking about raining hw could u say it?
and he did not say dat it (raining) depends upon temperature...
so i think u shud not consider the temperature ...
colA: 0.56
colB: 0.58
ans is B

Quant:

1. Given N is a positive odd integer. If the number in the tens digit is double the digit at the units place then what is the value of N?

- A. $n > 90$
- B. $30 < N$

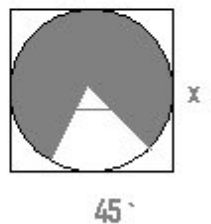
- C. $N > 50$
D. $30 < N < 50$

2. Given a series of numbers 1, -1, 2, -2, 3, -3.....

Col A: The sum of the first 67 terms

Col B: 34

3.



Given a figure like above, with the sector angle given as 45° & the side of the square is given as ' x '. Find the area of the shaded region?

4. If a, b, c are three integers with value 0, 1 or 2 and if $(3^2)a + 3b + c = 25$, then what is the value of $a + b + c$?

5. Given

$s(n) = 1$; if n is even

$s(n) = -1$; if n is odd

then what is $2^{s(3)} - 3^{s(4)}$?

6. Given length of hall is 48 feet and width of hall is 10 feet. If it has to be covered by square tiles of length 8 inches and tiles come in packets of 100 tiles, then how many packets have to be brought?

7. Given four consecutive numbers and if the least number is x , then what is the arithmetic mean in terms of x ?

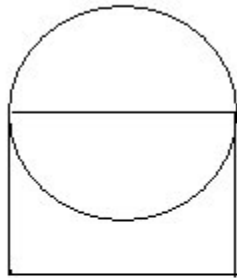
(given question is similar to this)

8. If $y > 0$, $2x = y + 1$, then for $xy > 0$ what is the value of x ?

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Quant:

1. For $n/12$, what is the value of n whose remainder is odd integer?
2. If ' x ' and ' y ' are integers between 12 and 30, then for $(5+x)/(7+y)$ how many sets of x & y for the given expression will be having same ratio?
3. Given five consecutive numbers, if the highest value of them is x , then what is the average of the numbers?
4. Given series 1, 1, 1, 1, 1
Col A: Standard Deviation of given series
Col B: 1
- 5.



Given a figure like above i.e. a square whose side is equal to diameter of the circle, find the area of circle?
(Similar to this)

6. A teacher teaches biology for a group 53 students. She can divide them into two batches P and Q. P has 7 batches of ' n ' students each. Q has ' x ' students of five batches; or six students with ' y ' students in 5 batches and $(y+1)$ students in 6th batch.

Col A: x
Col B: n

7. If x is a positive number, then

Col A: x^2

Col B: $1/x^2$

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Quant:

1. A triangle ABC is given, in which lengths of two sides were given as $BC = 12$, $AC = 13$ and the perimeter of the triangle is 32.

Col A: Measure of angle of B

Col B: 90

2. Given the average of seven numbers as 35. When k is added to it, if the average of eight numbers remains 35, then what is the value of k ?

3. Col A: $2^{-1} + 1/(2)^{-1}$

Col B: $(3)^{-1} + 1/(3)^{-1}$

4. If $x > 0$ and $y > 0$, then

Col A: \sqrt{xy}

Col B: $\sqrt{x+y}$

5. Given a cube consisting of small tiles of dimension 1 feet, the small tiles spread across length are 9 in amount, across height are 3 in amount and across width are 6 in amount{ not sure}. Find the total surface area of cube?

6. Given a circular flower garden with radius ' r ' and a stone walk surrounds the garden whose thickness is given as half the circular garden.

Col A: Area of circular garden

Col B: Area of stone walk

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Quant:

1. Given that, the probability that it won't rain tomorrow is 0.46

Col A: The probability that it will rain tomorrow at temperature of 85degree centigrade

Col B: 0.54

2. If ' N ' is a 3 digit number where hundreds place is ' x ' and units place is ' y ' then what will be the factor for $N - 100x - y$?

A. 3

B. 4

- C. 5
- D. 6
- E. 7

3. If 'S' is a set of all integers that are multiples of 3 & multiples of 5, provided it should be of 2 digits, then find the range of S?

- A. 81
- B. 77
- C. 87
- D. 89
- E. 91

(Given question is similar to this)

4. Find the number of possible values of x & y in the expression $(5+x)/(7+y)$, so that the resultant ratio is 5:7 where x and y lie between 12 and 29?

5. If $-2 < x < -1$, then

Col A: $1/x^3$

Col B: $1/x$

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1.C

2. i think middle digit is missing.....if we assume no:as $315 \Rightarrow N-100x-y = 315-300-5=10$ so ans =5

if we assume no:as $325 \Rightarrow N-100x-y = 325-300-5=20$ so ans =5,4

3.75

4.(15,21), (20,20).....(considering x & y integer)

5.D

Quant:

1.The value of $2^{-3} + 2^{-2} + 2^{-1}$

A. $2^{-6} * 7$

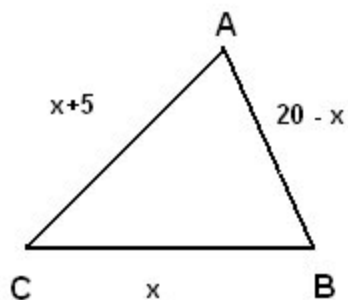
B. $2^{-3} * 6$

C. $2^{-3} * 7$

D. $2^{-3} * 3$

& so on....

2.



What could not be the possible value of x ?

A.15

B.11

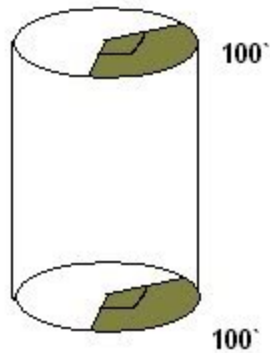
C.8

& some other options (less than numerical value 15) were given.

3.If 'R' is 30% of 'S' and 'S' is 40% of 'T', then what is the relation between 'R' and 'T'?

4.Given length of hall is 48 feet and width of hall is 10 feet. If it has to be covered by square tiles of length 8 inches and tiles come in packets of 100 tiles, then how many packets have to be brought?

5.



Given a cylinder like above, if radius of the cylinder is 1 and height is 6(not sure), then

Col A: Area of the shaded region

Col B: 5π

6.If $10 < 2k < 16$ and $7 < k+3 < 10$, then

Col A: k

Col B: 6

7.Standard Deviation and mean of a set of numbers were given. Even the largest & smallest numbers of the set were also given and question is how many numbers are there in the set?
(similar to this)

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- 1)C
- 2)A
- 3) $25R=3T$
- 4)11
- 5)B
- 6)C
- 7) 😊

venkatareddy

Quant:

1.Given volume of a sphere with radius ' r ' is $\frac{4}{3}\pi r^3$, now if radius of another sphere is ' $2r$ ' then how

many times is the second sphere bigger than first sphere?

2. Given that there are 6 people, 3 girls and 3 boys. Find the number of ways they can be seated on 6 chairs, such that a boy and a girl must seat together?

3. How many positive integers are divisible by 2 and 3 below 54?

4. A price of product 'x' is increased by 'p%' to give new price 'y' and then price of 'y' is reduced by 'r%' to give original price.

Col A: p

Col B: r

5. If 'x' is divisible by 3, then what is the next large number divisible by three?

A. $x+3$

B. $x+1$

C. $x+2$

D. $3x$

6. Given P, Q and R are on the same plane, if 'R' is 5 units away from 'P' and if 'P' is 13 units away from Q, then how many 'd' units is R from Q?

i. $d \geq 8$

ii. $d \leq 18$

iii. $5 \leq d \leq 13$

A. I only

B. I & II

C. III only

D. II & III

7. If $8k - 5m = 15$ & $2k + m = 15$, then

Col A: k

Col B: m

8. Col A: $(1/2) + (1/3) + (1/4)$

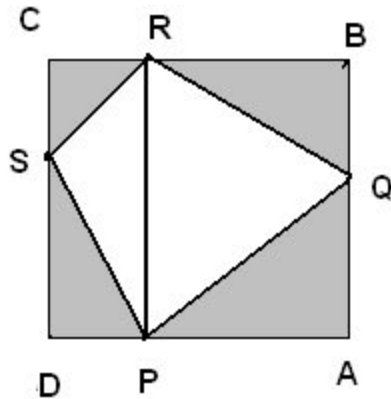
Col B: 1

9. If 40% of y is multiplied to 50% of 3y, then how much percent is it to $2y^2$?

10. Col A: $(2/3)^1 * (3/2)^{-1}$

Col B: 1

11.



A square ABCD is given in which quadrilateral PQRS (such that 'P' lies on AD, 'Q' lies on AB, 'R' lies on BC & 'S' lies on CD) was inscribed. If PR was given parallel to CD and if the length of CD is given as 10, then

Col A: Area of the portion shaded (which doesn't lie in the quadrilateral)

Col B: 50

12. Col A: $(78)(4) - (94)(5)$

Col B: $(73)(4) + (94)(5)$

13. The value of $((48)^{1/2}) * (27)^{1/2}$ is

14. If the mean of 6, 10, 2, $m+1$ & m is 5, then what is the median of the five terms?

15. Given that 7 workers working together finish a work in 140 hrs. If starting 4 workers takes 'h' hrs each and rest 3 takes '2h' hrs each to complete the work then what is the difference between the median and mean of the individual working hours?

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1) $(27/3)(1/\pi^3 * r^6)$

2) 36

3) 9

4) D

5) A

6) B

7) C

8) A

9) 30%

- 10)B
- 11)C
- 12)B
- 13)36
- 14)4
- 15) 😊

venkatareddy

Q-1 can u plz explain this one. I think its fairly simple Volume of Sphere2 is 8 times of the Sphere1

Q-3 The question is asking number of integers divisible by 2 and 3 BELOW 54 (54 is not included) so my answer is 8

Q-4 My answer is A. the bring the price to original value you will have to decrease by lower percentage

Q-15 My answer is "6" (Mean= 20, Median=14)

hi,

I got some different answers:

Q1. 8 (same as malik99)

Q2. 72

Q15. 0.42 (approx)

- 1)8
- 2)36
- 3)8
- 4)A
- 5)A
- 6)B
- 7)C
- 😊A
- 9)30%
- 10)B
- 11)C
- 12)B
- 13)36
- 14)4
- 15) 20-14=6

Quant:

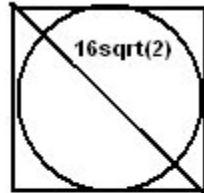
1. If $n/12$ is the odd integer, then what is the value of n ?

A. 24

B. 48

- C. 60
- D. 72

2.



Given a square with circle inscribed in it as above. If the length of the diagonal is $16\sqrt{2}$, then what is the value of radius?

3. If sum of the two base areas of a cylinder is equal to its curved surface area, then what is the relation between 'r' and 'h'?

4. If $f(x) = x^2$, then

Col A: $f(x)$

Col B: $f(x-1)$

5. If the quadratic mean is defined as $\sqrt{a^2 + b^2 + c^2}$, then

Col A: The quadratic mean of -20, 10 & 4

Col B: The arithmetic mean of -20, 10 & 4

6. Given ratio of two sides of a right angle triangle as 3:1 and if the hypotenuse length is $\sqrt{40}$, then what is the perimeter of the triangle?

7. Col A: $[(-0.2)^{-1}][(0.5)^{-2}]$

Col B: $[(-0.2)^{-1}][(-0.5)^{-2}]$

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1.c
2.8
3.??
4.d
5.a
6.4+sqrt10
7.b

1.C
2.8
3. r=h
4.D
5.A
6.8+2*sqrt(10)
7.C

1.C
2.8
3.R=H
4.D
5.A
6.>14
7.C

Quant:

1. Col A: Standard Deviation of 4, 6, 7 & 9
Col B: Standard Deviation of 3, 6, 7 & 10

2. Given two points (3,3) and (5,5) and line $y = 2x + 3$
Col A: Slope of line
Col B: 1

3. If $xy > 0$, then
Col a: $x+y$
Col b: 0

4. Given a line $y = ax+b$, what is the slope of the line?

5. Col A: Standard Deviation of 0, 1, 2 & 4
Col B: Standard Deviation of 2, 3, 4 & 5

6. Given that 500 people were asked two questions whether to say either 'yes' or 'no'. Of that, if 410 people said yes to first one and 220 people said yes to second question. What is the least number that said yes to both?
A. 90
B.110
C.150

D. 190
E. 220

7. If sum of the two base areas of a cylinder is equal to its curved surface area, then what is the relation between 'r' and 'h'?

8. Given a triangle with sides $AB=5$ & $BC=13$. If $AB:BC = 5:13$, then what is ratio of $BC:AC$?

9. If a coin is tossed once, the probability of getting head is $1/2$ and if it is tossed 4 times, then what is the probability of getting 3 heads?

10. If a line with equation $3y-2x=19$ is plotted on a graph, then which of the points meets x-axis?
(Something like this)

11. If a value(some variable) in 1990 is 30% more than that of 1989, and is 20% increased in 1991, then
Col A: Value in 1991 compared to 1989 as percent
Col B: 105%
(Some thing like this)

12. Col A: $10!+9!$
Col B: $10(9!)$

13. In a class, the average age of 55 girls is 'g' and that of 45 boys is 'b'. If $b>g$, then
Col A: The average age of these 100 students
Col B: $(b+g)/2$

14. If $x = 27$, $y = 3$ & $z = 14$, then
Col A: $\sqrt{(x^2+y^2+z^2)/3}$
Col B: Arithmetic mean of x, y & z

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Quant:

1. Given length of a hall as 48 feet and width as 10 feet. If it has to be covered by square tiles of length 8 inches and tiles come in packets of 100 tiles, then how many packets have to be brought?

2. Given a cylinder like above, if radius of the cylinder is 1 and height is 6(not sure), then
Col A: Area of the shaded region
Col B: 5π

3. If 'N' is a 3 digit number where hundreds place is 'x' and units place is 'y' then what will be the factor for $N-100x-y$?
A. 3
B. 4
C. 5
D. 6
E. 7

4. The value of $(7)^2 * (840)^{-6}$ is
(Options were given in terms of powers)

5. How many numbers are there between 100 and 999 which start with odd number and ends with 01?

6. What is the equation of the line passing through $y=mx+a$, whose 'y' intercept is twice the 'x' intercept?
(It is a quantitative comparison question with Col A & Col B)

7. Given a table as follows
No. of Employee Work hours
1 50
2 20
...
...
100 70
Find the mean of the data?
(Similar to this)

8. Given that a value
In 1993 it is $x\%$,
In 1994 it is 30% more than 1993 &
In 1995 it is 20% less than 1994.
Col A: What percent of 1995 is 1993
Col B: 105%

9. If $|x| - x = |x| - 2$, then
Col A: x
Col B: $-1/2$

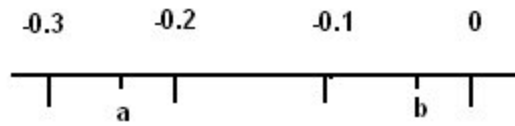
10. If the simple interest of a principal amount Rs.600 at certain length of time is Rs.90, then what is its rate of interest?

11. If $(x+1) / \{x(x+1)\} = (x+2) / \{x(x+2)\}$, then find x ?

12. Given two lines that are perpendicular to each other. Slope of one line is given and asked to find the slope of other line?

13. If $-3 \leq x \leq 6$ & $3 \leq y \leq 6$, then what is the greatest positive value of $-x^2 + y^4$?

14.



Given a figure like above. What is the distance between points 'a' and 'b'?

& few previous database questions.

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my answers r:

1. 11
2. ??
3. C
4. $((12)^{-6}) * (7^{-4})$
5. 5
6. $y = -2x + 2a$ (not sure)
7. ??
8. B
9. A
10. 15
11. ??
12. if given slope is m then ans will be $-m$
13. 1152
14. 0.2

Quant:

1. If 'N' is a 3 digit number where hundreds place is 'x' and units place is 'y' then what will be the factor for $N - 100x - y$?
 - A. 3
 - B. 4
 - C. 5

- D. 6
E. 7

2. If $a*b$ is defined by $a*b = (a/b) - (b/a)$

- i. $a*a = 0$
ii. $b*(1/b) = 1$
iii. $a*b = -(b*a)$

A. i is correct

B. i & ii are correct

C. ii & iii are correct

D. i, ii & iii are correct

E. None of the above

3. If $x + y = 12$, $z^2 + 1 = 7$

Col A: Average(arithmetic mean) of x , y & z

Col B: 5

4. If a solution of 'P' grams contains 5% of salt and if another solution of 500g which contains 3.5% salt is added to P, then how much solution is still to be added to make the total solution 4% salt?

- A. 75
B. 100
C. 1000
D. 2000
E. 2500

5. Given five interior angles of pentagon x , x , x , $x-90$ & $x+80$. What is the value of x ?

- A. 105
B. 106
C. 107
D. 104
E. 108

6. Col A: $(0.9/1.1)^2 + (1.1/0.9)^2$

Col B: 2

7. In triangle ABC, if $AB = 6$, $BC = 8$ & $\angle B = 90$ then

Col A: Area of triangle ABC

Col B: 24

8. Given that a telephone exchange has numbers from 1000 to 1799 group. A contains numbers starting with 33 and 34 and directors numbers end with either 0 or 1. Find the percentage of directors present in Group A?

- A. 6%
B. 7%
C. 5%
D. 8%
E. 4%

9. If $xy > 0$, then

Col A: $x+y$

Col B: 0

10. A person collects various coins, if he buys a [foreign coin](#) for \$15 and sells it for \$25 and again buys it for \$35 and sells it for \$45 then which of the above is true?

- A. Has a profit of \$20
- B. Has a profit of \$15
- C. Has a loss of \$10
- D. Has a profit of \$10
- E. Has profit \$0

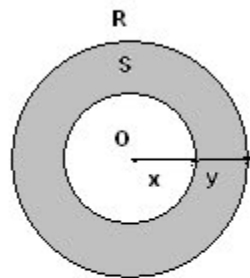
11. Col A: $4\sqrt{4}$

Col B: $\sqrt{36}$

12. Col A: Standard Deviation of 4, 6, 7 & 9

Col B: Standard Deviation of 3, 6, 7 & 10

13.



Given a figure like above of concentric circles 'S' and 'R', the radius of inner circle 'S' is given as 'x' & the distance between outer circle and inner circle is given as 'y'. If the area of inner circle is equal to area of the shaded region, then what is 'x' in terms of 'y'?

- A. $1/\sqrt{x}$
- B. $x(\sqrt{2}-1)$
- C. $x(\sqrt{2}+1)$
- D. $1/x^2$
- E. $1/x$

14. Given Population of a city in 1980 as 'p', if it increases at a rate of 3.6 every year, then

Col A: What is the population of city in 1982?

Col B: 1.073

15. Given P, Q and R are on the same plane, if 'R' is 5 units away from 'P' and if 'P' is 13 units away from 'Q', then how many 'd' units is 'R' from 'Q'?

- i. $d > 8$
 - ii. $d \leq 18$
 - iii. $5 < d < 13$
- A. I only
B. I & II
C. III only
D. II & III

16. If 'x' and 'y' are integers between 12 and 30, then for $(5+x)/(7+y)$ how many sets of x & y for the given expression will be having ratio 5/7?

- A. 4
B. 5
C. 2
D. 6
E. 3

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- 1. C
- 2. B
- 3. B
- 4. need the value of 'p'
- 5. 110
- 6. A
- 7. C
- 8. C
- 9. D
- 10. A
- 11. A
- 12. B
- 13. ??
- 14. C
- 15. B
- 16. C

please verify.

- 1. C
- 2. B
- 3. B
- 4. need the value of 'p'
- 5. 110
- 6. A
- 7. C
- 8. C
- 9. D
- 10. A
- 11. A
- 12. B
- 13. ??
- 14. C
- 15. B
- 16. C

$$2) b \cdot \frac{1}{b} = b^2 - \frac{1}{b^2}$$

I & III are correct

ans: E

$$13) y = x(2^{1/2} - 1)$$

could u plz explain 8 & 14 probulums?

plzzzzzzzz

venkatareddy

13) radius of inner circle = x ,
radius area of outer circle = $(x+y)$
area of shaded region = area of unshaded region

$$\pi(x+y)^2 - \pi x^2 = \pi x^2$$

$$(x+y)^2 = 2x^2$$

$$x+y = 2^{1/2}x$$

$$y = x(2^{1/2} - 1)$$

venkatareddy

thanks venkatareddy

got it. i just miscalculated 😞

13. $x(2^{1/2} - 1)$ that is B

Quant:

1. If an integer is defined as $(-1)^n$ then which of the following is applicable for integers a and b ?

- i. $a+b = a*b$;
- ii. $(a+b) = (a) + (b)$;
- iii. $(a*b) = (a)*(b)$;
- A. Only i.
- B. Only ii.
- C. Both i and ii
- D. All the three
- E. None

2. If $a < b < c$ and if they are the angles of the triangle, then

Col A: $a+b$

Col B: c

3. If $(x - y) = \text{odd value}$ and K is an integer, which of the following is always odd?

- A. x
- B. y
- C. $k(x-y)$
- D. $(x-y)^2$

E. $(x-y+k)$

4. Given a triangle with sides 5, 6 and 8. If angle opposite to side 5 is 'x' and angle opposite to side 6 is 'y', then

Col A: $x+y$

Col B: 90

5. If the surface area of the cube is 36, then

Col A: The volume of the cube

Col B: 15

6. If $x > y$, then

Col A: x^2

Col B: y^2

7. Col A: $(\sqrt{48}) + \sqrt{27})^2$

Col B: 3

8. Col A: Standard Deviation of 1, 1, 1, 1 & 1

Col B: 1

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1. both ii and iii
2. D
3. D
4. B
5. B
6. D
7. A
8. B

please verify

hi deena

all are correct

1. both ii and iii
2. D
3. D
4. B
5. B
6. D
7. A
8. B

venkatareddy

1. If an integer is defined as $(-1)^n$ then which of the following is applicable for integers [a and b](#) ?
 - i. $a+b = a*b$;
 - ii. $(a+b)=(a)+(b)$;
 - iii. $(a*b)=(a)*(b)$;

could you please explain me how you solved question 1.
advance thanks.

I think ans for 4th ques is "A"

using fact when $a \leq b \leq c$

then $(a^2 + b^2) < c^2$ when c is obtuse

i.e > 90 so the ans is A.

C is obtuse, so the sum of other two angles must be less than 90.
so, B is the ans

sorry i explained it.....but over looked ans..thanx any way.....

Quant:

1. A rectangular solid is given which consists of 10 cubes in 1 row and 3 cubes in 1 column. In that manner there are 10 rows and 3 columns. If the length of edge of the cube is 1, then what is the surface area of the rectangular solid?

2. In a total of 160 members, 25% are women and 45% are non-minority members. If $\frac{1}{9}$ of the women are minority members, then what is the total number of people who are neither women nor minority members?

3. In triangle ABC, if $AB = AC = 4$, then
Col A: BC
Col B: 5

4. If $-10 \leq x \leq 10$ & $-11 \leq y \leq 11$, then what is the greatest possible value of $y - x$?

5. In a box there are 12 dimes, 4 quarters & 26 diamonds. If 4 are removed, then what is the probability that 3 are dimes (Provided should be removed without replacement)?

6. Given sides of a triangle. Find the area of triangle?

7. Col A: Quadratic square of -12, 3 & 10
Col B: Arithmetic mean of -12, 3 & 10

8. How many cubes of edge length 1 and 2 can be fitted into the rectangular solid, if the volume of the rectangular solid is $35 \times 10 \times 15$?

9. In a college, $\frac{1}{15}$ of the students are absent, $\frac{1}{4}$ of present went to a field. If the students present in school are 1000, then how much is the actual strength of the school?

10. Given three series

I: $x, 2x, 3x, 4x, 5x$

II: $x, x+1, x+2, x+3$

III: $1/x, 1/(x+1), 1/(x+2), 1/(x+3)$

Which of the series has same mean and median?

11. Given a series of numbers 1, -1, 2, -2, 3, -3.....

Col A: The sum of the first 67 terms

Col B: 34

12. Given length of hall is 48 feet and width of hall is 10 feet. If it has to be covered by square tiles of length 8 inches and tiles come in packets of 100 tiles, then how many packets have to be brought?

13. Given that, the probability that it won't rain tomorrow is 0.46

Col A: The probability that it will rain tomorrow at temperature of 85 degree centigrade

Col B: 0.54

14. If $xy > 0$, then

Col A: $x+y$

Col B: 0

15. Given a graph of some irregular shape in quadrants with each unit as 5 mts and asked to find approximate area of the figure?

16. Given that a telephone exchange has numbers from 1000 to 1799 group. If Group A contains numbers starting with 33 & 34 and directors numbers end with either 0 or 1, then find the percentage of directors present in Group A? (Instead of telephone numbers, car numbers were given)

A. 6%

B. 7%

C. 5%

D. 8%

E. 4%

17. If $xy > 0$, then

Col A: $x+y$

Col B: 0

18. Given two points (3, 4) and (t, t) and if the slope of the line is negative, then

Col A: t

Col B: 3

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1. 86
2. 72 ?? qs is not clear to me
3. D
4. 21
5. 220/3731
6. data req.
7. A

8. qs should b more specific

9. $10,000/7$ 🟡

10. i & ii

11. C

12. 11

13. D

14. D

15. data req.

16. C

17. D

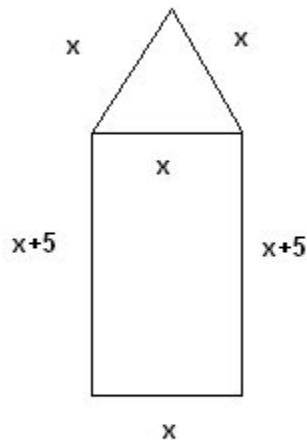
18. A

please verify

Quant:

1. If $y = 2x+3$ & $xy < 0$, then the value of 'x' lies between?

2.



Given a figure as above with an equilateral triangle placed on one of the short side of the rectangle. If the triangle side length is x & the length of rectangle is 5 times more than x , then find the perimeter of the polygon?

3. Col A: The remainder when 4^{10} is divided by 5

Col B: The remainder when 3^{12} is divided by 5

4. Given a point 4 on positive x-axis in the coordinate system, then find the next positive even number less than 4?

5. Given a triangle with side lengths 6.1 & 8.1 and longest side length as 14. Find the angle between length

sides 6.1 and 8.1?

6. Given that one 5 meters length wire is cut into 2 pieces. If one of them is x meters, then

Col A: Length of other piece

Col B: $5-x$

7. Given $x = 2.135678$, n is number of digits after decimal part of x . If $|x-y| = 0.0004$, then the maximum value of n is

A. 1

B. 2

C. 3

D. 4

E. 5

8. If the surface area of a cube 'C' is 384, then what is surface area of a cube having edge length, half that of the edge length of cube 'C'?

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Quant:

1. From a set of positive numbers 1 to 100, two numbers x & y are to be selected at random.

Col A: Probability that the two numbers x & y are even

Col B: Probability that the sum of two numbers selected is even

2. If n is a multiple of 35, then

Col A: Number of prime factors of n

Col B: 4

3. The two legs of a right angle triangle are in the ratio 3 is to 1. If the length of the hypotenuse is $\sqrt{40}$, then find the perimeter of the triangle?

A. 14 to 15

B. 13 to 14

C. 12 to 13

D. 11 to 12

E. 10 to 11

4. The relationship between a and b is defined as

$a @ b = a/b - b/a$, then

I. For $a \neq 0$, $a @ a = 0$

II. For $b \neq 0$, $b @ 1/b = 1$

III. For $(a*b) \neq 0$, $a @ b = -(b @ a)$

A. I

B. II

C. I & II

D. II & III

E. I & III

5. If $x < y < 0$, then

Col A: xy

Col B: $y - x$

6. Given that P1, P2, P3 work together to complete a work in 4hrs. If P1 & P2 can complete the work in 6days, then P3 alone can complete the work in how many days?
(Something like this)

7. If $x^2 - x > 0$ and $|x| < 1$, then

Col A: $|x|$

Col B: x

8. Given that a telephone exchange has numbers from 3000 to 3799 group. If Group1 contains numbers starting with 33 and 34 and if manager numbers of the Group1 end with either 0 or 1, then find the percentage of managers present in the company?

A. 6%

B. 7%

C. 5%

D. 8%

E. 9%

9. Col A: $2^{-1} + 3^{-1} + 4^{-1}$

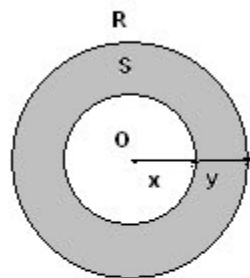
Col B: 1^{-1}

10. If $8k - 5m = 15$ & $2k + m = 15$, then

Col A: k

Col B: m

11.



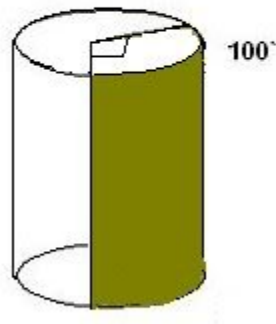
Given a figure like above of concentric circles 'S' and 'R', the radius of inner circle 'S' is given as 'x' & the distance between outer circle and inner circle is given as 'y'. If the area of inner circle is equal to area of the shaded region, then what is 'y' in terms of 'x'?

- A. $x/\sqrt{2}$
- B. $x*\sqrt{2}$
- C. $x\{\sqrt{2} + 1\}$
- D. $x\{\sqrt{2} - 1\}$
- & so on.....

12. If 40% of y is multiplied to 50% of $3y$, then how much percent is it to $2y^2$?

- A. 0.6%
- B. 1.5%
- C. 3%
- D. 6%
- E. 12%

13.



Given a cylinder like above, if radius of the cylinder is 1 and height is 6(not sure), then

Col A: Area of the shaded region

Col B: 5π

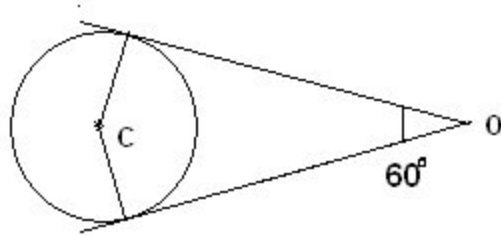
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- 1.B
- 2.A
- 3.A
- 4.E
- 5.D
- 6.6/35 days
- 7.D
- 8.C
- 9.A

- 10.C
- 11.D
- 12.C
- 13.A

Quant:

1. Col A: The remainder when 4^{20} is divided by 5
Col B: The remainder when 3^{12} is divided by 4
2. Given $x = 2.135678$, n is number of digits after decimal part of x . If $|x-y| = 0.0004$, then the maximum value of n is
A. 1
B. 2
C. 3
D. 4
E. 5
3. Given that one 5 meters length wire is cut into 2 pieces cross-wise. If one of them is x meters, then
Col A: Length of other piece
Col B: $5-x$
4. In a total of 160 members, 25% are women and 45% are non-minority members. If $\frac{1}{9}$ of the women are minority members, then what is the total number of people who are neither women nor minority members?
5. If $-10 \leq x \leq 10$ & $-11 \leq y \leq 11$, then what is the greatest possible value of $y - x$?
6. If the surface area of one side of the cube is 36, then
Col A: The volume of the cube
Col B: 15
7. Col A: Standard Deviation of $n-4, n-2, n, n+2$ & $n+4$
Col B: Standard Deviation of $n-2, n-1, n, n+1$ & $n+2$
8. If sum of the two base areas of a cylinder is equal to its curved surface area, then what is the relation between ' r ' and ' h '?
9. Col A: $10!+9!$
Col B: $10(9!)$
- 10.



Here 'C' is the centre and those lines are tangents to the circle which meets at 'O'. If the angle it makes is 60° and the area enclosed by angle C is 27π then what is the circumference of the circle?

11. If $15 \cdot 40 \cdot 160 = (2^x)(4^y)(5^z)$, then find the value $x+y$?

12. The two legs of a right angle triangle are in the ratio 3 is to 1. If the length of the hypotenuse is $\sqrt{40}$, then find the perimeter of the triangle?

- A. 14 to 15
- B. 13 to 14
- C. 12 to 13
- D. 11 to 12
- E. 10 to 11

13. If $x^2 - x > 0$ and $|x| < 1$, then

Col A: $|x|$

Col B: x

14. In triangle ABC, if $AB = AC = 4$, then

Col A: BC

Col B: 5

15. Given three series

I: $x, 2x, 3x, 4x, 5x$

II: $x, x+1, x+2, x+3$

III: $1/x, 1/(x+1), 1/(x+2), 1/(x+3)$

Which of the series has same mean and median?

16. Given a series of numbers 1, -1, 2, -2, 3, -3,.....

Col A: The sum of the first 67 terms

Col B: 34

17. Col A: $4\sqrt{4}$
Col B: $\sqrt{36}$

18. Given P, Q and R are on the same plane, if 'R' is 5 units away from 'P' and if 'P' is 13 units away from 'Q', then how many 'd' units is 'R' from 'Q'?

- i. $d > 8$
- ii. $d < 18$
- iii. $5 < d < 13$

- A. I only
- B. I & II
- C. III only
- D. II & III

& few previous database questions.....

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- 1 -c
- 2-
- 3-d
- 4-48
- 5-21
- 6
- 7-c
- 8-
- 9-a
- 10-
- 11-5!!!!!!
- 12-e
- 13-a
- 14-d
- 15-i&ii
- 16-b
- 17-a
- 18-b

Last edited by D.V.Ramesh on Tue Jan 06, 2009 5:13 am; edited 1 time in total

- 1-a
- 2-e
- 3-c??
- 4-32
- 5-21
- 6-a
- 7-??
- 8-r=r+h
- 9-a
- 10-2pie
- 11-?
- 12-e?
- 13-d
- 14-d
- 15-none
- 16-b?

17-a
18-b

- 1.C
2. ?
- 3.D
- 4.36
- 5.21
- 6.A
- 7.A
- 8.R=H
- 9.A
- 10.18*PI
11. ?
- 12.A
- 13.D
- 14.D
15. I & II
- 16.C
- 17.D
- 18.B

1. Col A: $149!/148!$
Col B: $(149!*148!-148!)/147!$
2. An area of 1350 is given whose length is 15yards more than the width. Calculate the amount of wire needed for fencing in yards?
3. In a college of 700 students, 200 choose maths, 350 choose science, 250 choose history, 150 choose both science and math and 100 chose neither. Calculate the number of sophomores who chose all three?
4. If x and y are positive even numbers, then
Col A: $(-1)^{(x+y)/2}$
Col B: $(-1)^{(x+y)}$
5. If $Y = 135\text{degrees}$ and $Z = 145\text{degree}$ then find x?
6. A 6 bicylists has to be chosen from 4 adult and 4 children
Col A: How many 3 adult and 4 children teams can be formed
Col B: How many 2 adult and 2 children teams can be formed
7. The probability of A hitting the target is $2/3$. And probability of B hitting the same target is $4/7$. So, what is the probability that neither of them will hit the target?
8. There is a three digit number 'N'. 'X' is in hundreds digit, 'Y' is tens digit and 'Z' is units digit. If X is multiplied by 9, Y is multiplied by 6 and 'Z' by 2 and all the three are added up. What is the sum of N-735?
9. If $x < 0$, then
Col A: $[x]$
Col B: $-x$
10. There is a parabola whose equation was $y=2x-x^2$. The parabola was drawn such that, the curvy part was in the first quadrant.. and now if (s, t) is any point between positive x-axis and the curve
Col A: t
Col B: $2s-s^2$

- 1.B
- 2.150
- 3.
- 4.C
- 5.80 if $X+Y+Z=360$
- 6.B
- 7.1/7
- 8.
- 9.
- 10.B

Please correct me if iam wrong

4th quest i think D will come..

If u select $x=2$ & $y=4$ then B is greater
If u choose $x=4$ & $y=8$ then C is coming

So ans must be D.

Pls reply i have a gre on 12th..

1. In a triangle the three angles are given as X, X, Y . and the avg of two angles is 65, then what is the possible value of Y in the below options?
A. 60
B. 65
C. 70
D. 75
E. 80
Ans: E

2. Given a two figures, first figure contains a square with a circle of radius of the circle is 'r' inscribed in it and the area outside the circle(within the square) is shaded . Second figure contains a circle radius of 'r' with a square inscribed in it and the area outside the square(within the circle) is shaded.
Col A: Area of Shaded region in the first figure
Col B: Area of Shaded region in the Second figure

3. If $2n+1$ is the median of seven consecutive integers . What is the mean of the integers?
Ans: $2n+1$

4. N divided by 7, leaves remainder of 4. $N^2 + 5$ divided by 7, remainder is?
Sol:0

5. A triangle PQR was given in which lengths of two sides were given as $QR = 12$, $PR = 13$ and the perimeter of the triangle was 32.
Col A: Measure of angle of Q
Col B: 90
Sol: A

6. Given $xy > 0$ & $yz < 0$. Which of the following options are not possible?
A. $x > 0$ & $y > 0$
B. $y < 0$ & $z < 0$

C. $y > 0$ & $z > 0$

7. A person sells 1000 articles at no profit and no loss. If he sells each item after 1000 articles at 0.5\$, then he gets a profit of 'P'\$. How many such articles did he sold?

A. $2P + 1000$

B. $P/2 + 1000$.

options are like this.....

8. A triangle PQR was given in which lengths of two sides were given as $QR = 12$, $PR = 13$ and the perimeter of the triangle was 32.

Col A: Measure of angle of Q

Col B: 90

Sol: A

9. Given 6 symbols..... $*$, $*$, $?$, $?$, $?$, $\$$. How number of codes that can be formed from left to right using these 6 symbols... such that repetition is not allowed?

10. There was a ladder given. The ladder is of length 5 and it is displaced i.e slanted downwards such that it falls 'x' mts in height and its horizontal length increases by 'y' mts.

Col A: x

Col B: y

11. $M^2 = 4^x + 4^x + 4^x + 4^x$. What is the value of M?

answer is d.

why?

because for example take the values of height as 4 and take value of base as 3. so, your hypotenuse is 5 as given. now decrease the value of height by one so now the new height is 3 and the base increases by one unit to become 4. so now change in x and y is one so here option is c.

now further decrease the height and see what's the result. uneven change in x and y values.

so the option is d.

friends tell if i am wrong

Last edited by vattikonda on Sun Feb 10, 2008 11:28 am; edited 1 time in total

take the value of height as 4 and base value as 3 and the hypotenuse becomes 5. so change the values of height and base inch by inch and u will see the result

QUANT:

1. Col a: Area of circle with radius '8'

Col b: $3/2$ (area of square whose diagonal length is 8)

2. $33\frac{1}{2}\%$ of 40% of 600 is what % of 160?

3. Train A is traveling on a straight track at a constant speed of 50 km/hr & Train B is traveling on a straight track at a constant speed of 100 km/hr.

Col a: distance traveled by train A
Col b: distance traveled by train B

4. Given a semicircle. If the end the angles formed by lines from end points of diameter to the circumference was given 90 and the angle between one of the chords and diameter was 'x'.

Col a : x
Col b : 45

5. A square was given and another square was formed by joining mid points of the square. If perimeter of larger square was given k.

Col a: perimeter of smaller square
Col b: $k/2$

1. Given a circle with centre 'O' & radius 4. Two tangents are drawn from a point 'S'.... on to the circle at points 'P' and 'R' and joined to 'O'. Find the area of the arc 'POR' if the angle between the two tangents is given as 60degrees.

2. Given a triangle with 8,6,5 as sides. If two angles opposite to 6 and 5 are given as x, y then

Col a : $x+y$
Col b: 90

3. Given a Rectangular cylinder with volume 1200. If the height of rectangular cylinder is 12 times more than its radius then find the radius of the cylinder?

4. If $x=85$, then

Col A : cube root of x
Col B : 5.3

5. If $\#n = (n-1)(n-2)(n-3)$, then the value of $\#1+\#2+\#3+\#4$ is?

6. A triangle PQR was given in which lengths of two sides were given as $QR = 12$, $PR = 13$ and the perimeter of the triangle was 32.

Col A: Measure of angle of Q
Col B: 90

7. Given $xy \neq 0$, $x \neq y$ and $x+y=0$ (' \neq ' means not equal to)

Col a: $x-y$
Col b: 0

8. $F(x) = X^2$

Col A: $f(x)+1$
Col B: $f(x+1)$

9. Given a fraction ' $2/7$ '. What is the 57th decimal of the fraction?

for question6 as we know that $a^2+b^2>c^2$ then the angle opposite to c must be less than 90deg. (here as $7^2+13^2>12^2$)so the option for this must be 'B'. but for the same question in many posts many have given option 'A' as their option.

please help Sir.

1. Given two sets of numbers 3,3,3,7,3,3,3 and 5,3,2,6,1,3,5. Which of the following is equal for the two sets?
- A. Mean
 - B. Median
 - C. Mode
 - D. None

2. $x < y < z$
Col a: xy
Col b: yz

3. There are two printers 'p' and 'q', printer 'p' prints 3600 pages in 'x' seconds and printer 'q' prints 3600 pages in 'y' seconds. How many pages does it can print in 1 sec if they work together?
Ans: $3600/x + 3600/y$

4. Given an series of numbers....
Col A: The standard deviation of the series
Col B: The range of the series

5. Given 5 symbols... &, &, *, *, \$. Find the number of different ways these five symbols can be arranged?

6. $x^2 = 36$; $x(x+6)(x+8) = 0$;
Col A: x
Col B: 0
Ans: B

7. Given $|x| = |y|$ & $xy < 0$
Col a : $x+y$
Col b : 0

8. A circle has two tangents at points A and B. They meet at point C outside circle...angle ACB is 50
col A : angle AOB
col B : 110
Ans: A

5. $x^2 = 36$; $x(x+6)(x+8) = 0$;
Col A: x
Col B: 0

--- > Ans: B ...How sir?

from the given equations we find that x can be -6 , -8 or 0 . which means

$x \leq 0$. So Answer should be D right ?

Correct me if i m wrong

thanks

1. Given a series a_1, a_2, \dots . If $a_{n+1} = (a_n - 1)^2 - 1$ and $a_1 = 2$ then find a_{17} ?

2. A square edges are increased by 0.1 inch and if the increase in the area is 0.75 then what is the original edge of the square?
A. 3.8
B. 3.7
C. 3.6
D. 3.5
E. 3.4

3. Given.... p, q, r are prime numbers.
Col A: Factors of pqr (including) pqr and 1
Col B: 8

4. There was a diagram of quadrilateral (like trapezium), two base angles were given as 40° & upper 3 sides were given of length x . Find the perimeter of that quadrilateral?
A. $(4 + \sqrt{2})x$
B. $(4 + 2\sqrt{2})x$

5. A Triangle was given with sides 5, 6 and 8. Angle opposite to side 5 is ' x ' and angle opposite to side 6 is ' y '.
Col A: $x+y$
Col B: 90

6. Given two points A (x_1, y_1) & B (x_2, y_2) such that $x_1 < x_2$ & $y_1 > y_2$
Col A: Slope of line AB
Col B: 0

7. There is a triangle which has all acute angles. If two sides of a triangle are given as 3, 4 then find the range of the third side x ?

Are the answers for the above questions

- 1) zero (0)
- 2) A 3) C 4) ? 5) B 6) B 7) $1 < x < 7$

can any body help out with question 4.

1. Given a series a_1, a_2, \dots . If $a_{n+1} = (a_n - 1)^2 - 1$ and $a_1 = 2$ then find a_{17} ?

==> 0

2. A square edges are increased by 0.1 inch and if the increase in the area is 0.75 then what is the original edge of the square?
A. 3.8
B. 3.7
C. 3.6
D. 3.5
E. 3.4

==> A

3. Given.... p, q, r are prime numbers.
Col A: Factors of pqr (including) pqr and 1

Col B: 8

COL B

4. There was a diagram of quadrilateral (like trapezium), two base angles were given as 40° & upper 3 sides were given of length x . Find the perimeter of that quadrilateral?

A. $(4 + \sqrt{2})x$

B. $(4 + 2\sqrt{2})x$

Question is not very clear to me. But, you can divide the quadrilateral into 2 triangles and one rectangle in order to calculate the base of two triangles, which along with the base of rectangle, will give the fourth side of figure.

5. A Triangle was given with sides 5, 6 and 8. Angle opposite to side 5 is ' x ' and angle opposite to side 6 is ' y '.

Col A: $x + y$

Col B: 90

COL B

6. Given two points A (x_1, y_1) & B (x_2, y_2) such that $x_1 < x_2$ & $y_1 > y_2$

COL A: Slope of line AB

Col B: 0

COL B

7. There is a triangle which has all acute angles. If two sides of a triangle are given as 3, 4 then find the range of the third side x ?

Less than 5?

By the way, how did you get the answer C for Number 3?

I was thinking:

Factors of PQR will give 3 numbers itself (i.e. P, Q, R). According to question, next two numbers are PQR and 1. So, I added them up ($3 + 1 + 1 = 5$). Hence $5 < 8$.

I would love to know how you got C.

Different minds work differently. Very interesting. 😊

The number of factors is based on the prime factorization.

For instance, if $x = p^n$, where p is prime, then it has $n + 1$ factors.

If $x = p^n * q^m$, where p and q are prime, then it has $(n + 1)(m + 1)$ factors

We can continue as far as we need.

$36 = 2^2 * 3^2$, so it has $(2 + 1)(2 + 1) = 3 * 3 = 9$ factors.

(To check: 1, 2, 3, 4, 6, 9, 12, 18, 36)

Minds work differently but logic remains same 😊

Last edited by vattikonda on Wed Feb 13, 2008 3:01 pm; edited 1 time in total

1. There are 25 positive integers and each integer is a multiple of m . Highest of these integers is 250.
Col A: m
Col B: 5

2. Given a triangle with its sides labelled as X, Y, Z . Question is each of the following is true EXCEPT
 - a. Angles make 180
 - b. $X^2 + Y^2 = Z^2$
 - c. $X > Y + Z$
 - d. something....

3. Scott bought x number of things at 50\$, y number of things at 100 \$ where y is greater than x .
Col A: Mean of X and y
Col B: 50

4. If $a > 0$, then
Col A: $|a - 8|$
Col B: $|a| - |8|$

5. If a sum of 2000\$ was given at rate of ' r ' for 1 year on simple interest and at the end of 1 year.. if 150\$ was the interest then find value of r ?
 - a. 0.75
 - b. 0.50
 - c. 0.075
 - d. 0.10

6. A semicircle was given with area $= 2\pi$. Find the perimeter of the semicircle?
Ans: $2\pi + 4$

7. $|x| \leq 6, |y| \leq 4$.
Col a: The maximum value of $|y/x|$
Col b: 1

8. $x^2 + y^2 = 7$
Col a: $x + y$
Col b: $x - y$

9. If Perimeter of circle is equal to perimeter of square then find ratio of their areas?

10. Given $(m - n) = 4$ & m, n are positive integers.
Col A: $(-1)^m$
Col B: $(-1)^n$
1. Given.... p, q, r are prime numbers.
Col A: Factors of pqr (including) pqr and 1
Col B: 8

2. Given a series a_1, a_2, \dots . If $a_{n+1} = (a_n - 1)^2 - 1$ and $a_1 = 2$ then find a_{17} ?

3. A square edges are increased by 0.1 inch and if the increase in the area is 0.75 then what is the original edge of the square?

- A. 3.8
- B. 3.7
- C. 3.6
- D. 3.5
- E. 3.4

4. There was a diagram of quadrilateral (like trapezium), two base angles were given as 45 degree & upper 3 sides were given of length x. Find the perimeter of that quadrilateral?

- A. $(4 + \sqrt{2})x$
- B. $(4 + 2\sqrt{2})x$

5. A Triangle was given with sides 5, 6 and 8. Angle opposite to side 5 is 'x' and angle opposite to side 6 is 'y'.

- Col A: $x + y$
- Col B: 90

Answer:

- 1. C
- 2. 0
- 3. B
- 5. A

Please confirm and also explain how to find the answer for 5th question?

Quant:

1. Given two points (3, 4) and (t, t) and if the slope of the line is negative, then

- Col A: t
- Col B: 3

2. Given three series

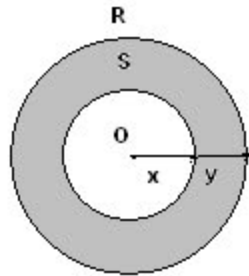
I: x, 2x, 3x, 4x, 5x

II: x, x+1, x+2, x+3

III: $1/x, 1/(x+1), 1/(x+2), 1/(x+3)$

Which of the series has same mean and median?

3.



Given a figure like above of concentric circles 'S' and 'R', the radius of inner circle 'S' is given as 'x' & the distance between outer circle and inner circle is given as 'y'. If the area of inner circle is equal to area of the shaded region, then what is 'x' in terms of 'y'?

4. Given Population of a city in 1980 as 'p', if it increases at a rate of 3.6 every year. What is the population of city in 1982?
(Similar to this)

5. Col A: Standard Deviation of 4, 6, 7 & 9
Col B: Standard Deviation of 3, 6, 7 & 10
(Something of this sort)

6. Given
 $s(n) = 1$; if n is even
 $s(n) = -1$; if n is odd
then what is the value of $2^{s(3)} - 4^{s(3)}$?

7. The value of $2^{-3} + 2^{-2} + 2^{-1}$
A. $2^{-6} \cdot 7$
B. $2^{-3} \cdot 6$
C. $2^{-3} \cdot 7$
D. $2^{-3} \cdot 3$

8. Col A: $(\frac{2}{3})^{1 \cdot (\frac{3}{2})^{-1}}$
Col B: 1

9. If $x^2 - x > 0$ and $|x| < 1$, then
Col A: x

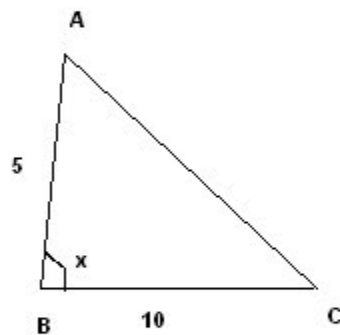
Col B: $|x|$

10. If x & y are the integers between 13 & 29, then how many sets of values of x & y , will give the ratio of $5/7$?

11. If 'S' is a set of all integers that are multiples of 3 & multiples of 5, provided it should be of 2 digits, then find the range of S?

- A. 81
- B. 77
- C. 87
- D. 89
- E. 91

12.



If $x > 90^\circ$, then

Col A: Area of triangle ABC

Col B: 25

13. If $0 < x < 5$ & $0 < y < 15$, then which of the following are true?

- i. $x < y$
 - ii. $x + y > 15$
 - iii. & some other condition in terms of x & y
- A. Only i
 - B. Only ii
 - C. Both i & ii
 - D. Only iii
 - & so on.....

Admin,
drrajusgre.com

Ans

1: A; [because t should lie between 3 and 4]

2: i, ii both

3. 🤔 [finally got equation $x^2 = 2xy + y^2$]

4. $p \cdot 4.6^2$; [$p(1+3.6)^2$ not sure]

5. B; [both has same mean 6.5 and it is evident from the value that B spreads more than A w.r.to mean.]

6. 2; [$2 \cdot (-1) - 4(-1)$]

7. C

8. B; [colA = 4/9 and colB = 1]

9. D; [colA can be both +ve and -ve and if +ve then equals to B]

10. 2; [15/21, 20/28]

11. 🤔; [some one help me to find it out. what does range mean here ?]

12. 🤔

13. 🤔

Please some one correct me and post the answer which I failed to do

11. It's pretty simple.... 'S' contains multiple of 3..(12-99) and mult of 5..(10-95) Range=99-10=89... correct me if i'm wrong....

can anyone explain....6,9,12..

Hi 2 all gre tet takers.....

1. The average of seven numbers is 35 then when k is added to it then the average of those 8 is 35.
What is the value of k?

2. If a number is divisible by 5 the remainder is 3 and when the same number is divided by 7 the remainder is 4. What is the least possible number?

Ans:18

3. A group of 1 professor and 3 [students](#) have to be made from 4 professor and 5 students.

Col a: Different ways in which the groups can be formed

Col b: 40

Ans: C

4. Given -14, -11, -7, 9, 10,13.... is the series

I. Median is greater than mean

II. S.D is greater than range

III. Mean is greater than median

A.1 only

B. 1 and 2 only

C.1,2 an 3 only

D. None of these

5. Col A: $[(2 + \sqrt{3}) / (2 - \sqrt{3})]^3$

Col B: $(10^6 / 3^6)$

Ans:B

6. There is a bag which contains ribbons of lengths 8m and 14m. If the total length of all threads is 100sq.m.

Col A: number of threads of length 8m

Col B: number of threads of length 14m

Ans: D

7. What is the percentage change of area of rectangle, when length is increased by 10% and width is decreased by 10%?

8. Given that a Square is inscribed in a circle and the diameter of circle is equal to diagonal of square and radius of the circle is

also given and the question was asked to find the area of square?

Question is something similar to this.....

9. Given a semicircle and there was a triangle inscribed in it, such that the base of triangle is same as diameter of circle. The other side of triangle was on the curve of a circle (it made 90 degree) and question was asked to compare the other angle with 45.

Question is something like this....

1. The series in which $a_1 = 3$... and $a_n = a_{(n-1)} + 3$ (here $n-1$ is the suffix)

Col a: a_{100} (here 100 is suffix)

Col b: 240

2. There is a series of odd numbers from 1 to n where n is an odd number. What is the probability that a number selected at random will be an odd number?

3. Col a: $(3^8 - 8) - (3^9 - 9) - (3^9 - 9)$

Col b: $3^9 - 9$

1. Given a number $2/7$. Find the fifty seventh number after the decimal point

a. 2

b. 8

c. 5

d. 7

e. 1

Ans: 5

2. Given a circle with centre 'T' and 'CTO' as the diameter. If the line 's' is a tangent to the circle, then find the angle 'SOT'?

Ans: 45 degrees

3. A line segment 'AG' was given. 'AG' is divided into equal parts (with equal distance)... Actual figure is like this..... A line with A, B, C, D, E, F, G points on the line segment with equal distance between them. If the value at point A is

-2.4 & value at end point G is 10.8, then find the value of 'E'?

Ans: 6.4

4. Given xy is not equal to 0 and x is not equal to y and $x+y=0$

Col a: $x-y$

Col b: 0

Ans: D

5. If 3 is multiplied by 10 and 3 is added to the result.....and if this process is continued up to ten digits....like 3

3 3

3 3 3

3 3 3 3

..... so on till 10 digits

Find the sum of all 3's in 100th place?

6. What is the percentage change of area of rectangle, when length is increased by 10% and width is decreased by 10%?

7. If a number is divisible by 5 the remainder is 3 and when the same number is divided by 7 the remainder is

4. What is the least possible number?

Ans: 18

8. When a number is multiplied by 13, it will become greater to 105 by an amount with which it is lesser to 105 by now. What is the number?

Ans: 15

9. Given $x < y < z$

Col A: xy

Col B: yz

1. Given $A_1, A_2, A_3, \dots, A_n, \dots$ is a series such that $A_n = A_n - A_{n-1}$, for $2 > n$. If $A_1 = -5$, $A_2 = 4$, find the sum of first 100 numbers of the series?

2. Given a triangle RST, $RS = 4$ & $ST = 3$ and the angles at R, S, T are less than 90 degrees. If $TR = y$ then the range of y is?

3. In a class of 20 students, one half of the students are boys, if a teacher has to select 7 students and the first 6 are girls

Col a: What is the probability that the 7th [student](#) is a girl

Col b: $2/7$

4. Train A is traveling on a straight track at a constant speed of 60 km/hr & Train B is traveling on a straight track at a constant

speed of 100 km/hr

Col a: distance traveled by train A

Col b: distance traveled by train B

6. Given a four sided Polygon is with 4 angles $x, 2x, 3x, 4x$. Find x ?

Ans: 36

7. Find the value of $0.01590/30.10 \dots$

8. Given two figures one is....a circle with radius ' r '.. inscribed in a square, and other is a square of diagonal ' r ' inscribed in a circle.

Col a: Area of shaded region in figure A
Col b: Area of shaded region in figure B

9. Find $(1/16)^{\text{th}}$ % 25?

10. In a triangle ABC, Angle B + Angle C = 90.
Col a: side AB
Col b: side CA
Ans: D

1. Given a series -9, 10, -11, 12, -13,, here all odd numbers are negative and all even numbers are positive.
Col A: the sum of the series (no's) till 100 is
Col B: XXX (some number)

2. Given a regular polygon with 12 sides. Find the measure of each angle?
Question is something like this....

3. $|x-2| < 1$ and $y < 0$
Col A: xy
Col B: 3

4. Given a fraction $20/7$. What is the digit at 57th decimal place of the given fraction value?

5. Given a triangle with one angle 60 degree and with a semicircle on the side opposite to the angle mentioned in the corner. If the two sides of the triangle adjacent to angle mentioned in the corner were 'x' units each then find the area of the triangle? Given Circumference of the semicircle as 15π .

6. Find $(x-2)^2 - (x-5)^2$

7. What is the value 20% of 25% of 678?

8. There was a circle to which two tangents were dropped and these tangents meet each other at a point outside the circle making an angle 'x' degrees, with centre 'O' which is extended to both the tangents. If the Angle at centre 'O' is 65 degrees then What is the value of x degrees?

9. Given that a Square is inscribed in a circle and the diameter of circle is equal to diagonal of square. If the radius of the circle is given as 'x' then find the area of square?

1. There are six special characters like ^, &, *, \$, @, %. How many different patterns can be formed using all six characters. Given that repetition is not allowed.

2. Two shelf T and S are given. If 3 books from S shelf are replaced to T shelf then the number of

books become equal. If 7 books from T are replaced to S shelf then 3 times books in T is equal to S.
What are
the total number of books?

3. Diagram was given of a square WSRT, from W vertex it is rotated 90 counterclockwise. The square so formed is WTR'S'. (Consider that W is in the left down vertex). Find how much distance does R has travelled if the side of the square is 2. (Question is something like this)

- a. 2
- b. 4
- c. $\pi/2$
- d. $2\sqrt{2}/\pi$

4. Col A: $|-x-y|$
Col B: $x+y$

5. The average of seven numbers is 35 then when k is added to it then the average of those 8 is 35.
What is the value of k?

6. If the sides of a right angled triangle are n, $2n-1$, $2n+1$ and 'n' being positive, then the value of 'hypotenuse' ?

- a) 8
 - b) 12
 - c) 15
 - d) 17
- Ans: d

7. Given xy is not equal to 0
 $(x)^{-1} - (y)^{-1} = (xy)^{-1}$
Col a: $x-y$
Col b: 1

8. If there are 'c' cartons and each carton has 'x' boxes which is being loaded in a truck in 'h' hours and 't' minutes.
Col a : The average time for loading the 'x' boxes of all cartons
Col b: $cx / (h+t/60)$

9. Given $|x| = |y|$ & $xy < 0$
Col a : $x+y$
Col b : 0

10. Given there are 50 numbers, if the average of the first 25 numbers is 16 ,next 10 numbers is 15 and the last set is 20. What is the average of the entire set ?

1. Compare the standard deviation of the following numbers.
Col A: 9,9,10,11,11
Col B: 6, 8,10,12,14
Ans: B

2. There are six special characters like ^, &, *, \$, @, % . How many different patterns can be formed using all six characters. Given that
repeation is not allowed.
Ans: 720

3. In a class of 20 students, one half of the students are boys, if a teacher has to select 7 students and the first 6 are girls

Col a: What is the probability that the 7th student is a girl

Col b: $2/7$

Ans: C

4. $0.3187/15.92$

Ans: 0.02

5. A triangle was given whose perimeter was 32 and two of its sides were given as 12 & 13.

(Question was given like this..... they had shown a right angled triangle in figure but did not marked angle as right angled it was

marked as X. Side opposite to it was marked as 13 and one of the adjacent sides was given as 12.

Col A : X

Col B : 90

6. If a number is divisible by 5 the remainder is 3 and when the same number is divided by 7 the remainder is 4. What is the least possible number?

Ans: 18

7. A rope of length x is cut into two halves. One of the length exceeds the other by 5

Col a: length of the shorter one

Col b: $x-5$

1. Given a triangle of two equal sides and the angle between them is 60 degree. If a semicircle whose arc length is ' 50π ' is drawn on the side opposite to 60 degree. Find the perimeter of triangle?

2. Given a tank with ' g ' gallons of liquid which is present at 1'clock. If a pipe of ' X ' litres/min was inserted into the tank and another pipe of ' Y ' litres/min was inserted as an outlet pipe at the same time, then at what time the tank was $(g/2)$ gallons?

3. Given $|x| = |y|$ & $xy < 0$

Col a : $x+y$

Col b : 0

Ans: C

4. A plane was flying from city 'M' to 'P' whose distance was 500 miles. While travelling from M to P it travelled at a speed of 500 miles/hr and during the return trip it travelled at a speed of 400 miles/hr.

Col A : The average speed of the trip is

Col B : 450 miles/hour

5. If $(101, 202)$, $(-1, \text{Something number})$ and $(x, 3)$ are three points on a line then find the value of x ?

6. Two cyclists are moving towards each other at 10 miles/hour. They are now 50 miles apart. At this

instance a fly starts from one cyclist and move towards other and moves to and fro till the two cyclist meet each other. If the fly is moving at 15 miles/hour, what is the total distance covered by the fly?
Ans: 37.5 miles

7. If a number is divisible by 5 the remainder is 3 and when the same number is divided by 7 the remainder is 4. What is the least possible number?
Ans: 18

8. $|x-7| < 2$ and $y < 0$
Col A: xy
Col B: 9

1. When a number is divisible by 3 then the sum of all its digits is also divisible by 3. Find a number divisible by 3 from the options.
This was the Question given

2. A triangle PQR was given in which lengths of two sides were given as $QR = 12$, $PR = 13$ and the perimeter of the triangle was 32.
Col A: Measure of angle of Q
Col B: 90

3. In a company, they decided to give a code to each.... and every employee need to have it. The code would be having first four alphabets from 'a' to 'z' but it should not be 'a' , 'e' , 'i' , 'o' , 'u' & 'p' and last three digits can be any from 0 to 9. If the numbers can be repeated then the total number of codes that can be generated from these digits is?

4. x and y both are on the same side of 0 in number line.
Col A: $x + y$
Col B: $|x+y|$

5. Given a square with a circle inscribed in it and the radius of the circle is 'r'. Another circle is given with a square inscribed in it and the radius of this circle is also 'r'. What is the ratio of area of smaller circle to area of larger circle?

6. Given a figure with a.... 12 sided polygon drawn inside the circle. Find the each interior angle?

7. Col a: $-2x+1/$
Col b: $-2x/+1/$

2. 1. $M = 4^x + 4^x + 4^x + 4^x$. What is the value of m^2 ?

2. $1/2 - \sqrt{3} = ?$

3. Given a square with a circle inscribed in it and the radius of the circle is 'r'. Another circle is given with a square inscribed in it and the radius of this circle is also 'r'.
Col A: Area of a circle inscribed in square
Col B: Area of a circle in which square is inscribed

4. Find the total number of diagonals of hexagon?

5. What is the percentage change of area of rectangle, when length is increased by 10% and width is decreased by 10% ?

6. Given $x < y < z$

Col A: xy

Col B: yz

7. If surface area of a cube is 36. Then Volume of the cube is?

1.Col A: $1 \setminus (-3)^4$

Col B : $(-3)^4$

Ans: B

2. Given four numbers in series each number is greater then previous one by 5 and when added result should be 111. What's the sequence?

Given 4 options.... question is something like this

3. Given $A = (9, 9, 10, 11, 11)$

$B = (8, 9, 10, 11, 12)$

Col A: standard deviation of A

Col B: standard deviation in B

4. When a number is divisible by 3 then the sum of all its digits is also divisible by 3. Find a number divisible by 3 from the options.

5. $m(\text{square}) + n(\text{square}) = 17$

Col A : $m+n$

Col B: 5

Ans: D

6. In a class of 20 [students](#), one half of the students are boys, if a teacher has to select 7 students and the first 6 are girls

Col a: What is the probability that the 7th student is a girl

Col b: $2/7$

Ans: C

7. A price of product x is increased by $p\%$ to give new price y and then price of y is reduced by $r\%$ to give original price.

Col A: p

Col B: r

Ans: A

8. If area of a square is 'x' and that of a rectangle is 'y', then

Col A: perimeter of square

Col B: perimeter of rectangle

1. If the Median of 7 consecutive even numbers is $2n+2$, then what is the Mean of these numbers?

Sol: $2n+2$

2. A person sells 1000 articles at no profit and no loss. If he sells each item after 1000 articles at 0.5\$, then he gets a profit of 'P'\$. How many such articles did he sold?
 A. $2P+1000$
 B. $P/2 + 1000$& so on
 option were like this

3. Given x-intercept as '3' and y-intercept as '3' . Find the line Equation?
 A. $x/3 - y/3 = 1$
 B. $3x + 3y = 1$
 C. $x/3 + y/3 = 1$
 D. $x/3 + y/3 = 0$

4. $x^2 = 36$; $x(x+6)(x+\text{😬}) = 0$;
 Col A: x
 Col B: 0
 Sol: B

5. A triangle PQR was given in which lengths of two sides were given as QR = 12 , PR = 13 and the perimeter of the triangle was 32.
 Col A: Measure of angle of Q
 Col B: 90
 Sol: A

6. Given a two figures, first figure contains a square with a circle of radius of the circle is 'r' inscribed in it and the area outside the circle(within the square) is shaded . Second figure contains a circle radius of 'r' with a square inscribed in it and the area outside the square(within the circle) is shaded.
 Col A: Area of Shaded region in the first figure
 Col B: Area of Shaded region in the Second figure

7. Given 6 symbols..... * , * , ? , ? , ? , \$. How number of codes that can be formed from left to right using these 6 symbols... such that repetition is not allowed?

8. $m(\text{square}) + n(\text{square}) = 17$
 Col A : $m+n$
 Col B: 5
 Ans: D

9. If surface area of a cube is 36. Then Volume of the cube is?

10. Given $x < 0$
 Col A: $(x-3)(x-4)$
 Col B: $(x-3)^2$

1. Given $xy > 0$ & $yz < 0$. Which of the following options are not possible?
 A. $x > 0$ & $y > 0$
 B. $y < 0$ & $z < 0$
 C. $y > 0$ & $z > 0$

2. Given a point (-2,3) which lies on xy plane. What is the x-intercept?

3. $(3^x) + 1 / (3^x) = \underline{\hspace{1cm}}$. What is the least possible value of the equation?

- A. 0
- B. 1
- C. $2^{(1/3)}$
- D. $3^{(1/3)}$

4. Given there are M oranges, N apples and M+N plums.

Col A: Ratio of apples to oranges

Col B: Ratio of plums to sum of oranges and apples

5. Given a line with points -4, -3, -2, -1, 0, 1, 2, 3, 4. If the points -4, -3, 0, 1, 2, 3, 4 are labelled with alphabets A to G.... then the Mean of these labelled numbers is how much less than median of these labelled numbers?

6. A person sells 1000 articles at no profit and no loss. If he sells each item after 1000 articles at 0.5\$, then he gets a profit of 'P'\$. How many such articles did he sold?

- A. $2P+1000$
- B. $P/2 + 1000$.

options are like this.....

7. Given a figure with a square of side 's' and triangle is on this square with its base as the side of the square (the figure looks likea triangle placed on the square...but not on the top of the square..... on the bottom side of the square, and this side is considered as triangle base). If the area of triangle = area of square, then find the altitude of triangle in terms of 's' ?

8. Given a line passing through (3,3) and origin. Find the equation of that line?

9. Find $(1/16)^{\text{th}}$ % 25?

10. Given $(m-n) = 4$ &
m, n are positive integers.

Col A: $(-1)^m$

Col B: $(-1)^n$

11. $-8 \leq n \leq 10$, $m+n=4$. Find the least possible value of mn?

- a. 0
- b. -32
- c. -140

12. Five numbers are given in options and was asked to find out the number divisible by 3?

13. Given a cuboid is with volume of 18 cubic foot and length 6 inches and was asked to find the out front side area (that means $(h*b)$..)

14. Given two equations $(x^2) - 36=0$ and $(x^2) - 2x - 48=0$. Find x?

1. If $7n$ is a multiple of 4 then how many values of $7n$ lie between 45 and 75?

2. Column A: The number of even numbers from 1 to 100... whose squares are also within the given range(1 to 100) is

Column B: the number of odd numbers from 1 to 100... whose squares are also within the given range is

3. A triangle PQR was given in which lengths of two sides were given as $QR = 12$, $PR = 13$ and the perimeter of the triangle was 32.

Col A: Measure of angle of Q

Col B: 90

Sol: A

4. If $x > 0$

ColA: $(2x)^0 + (2x)^1 + (2x)^2 + (2x)$

ColB: $1/x$

5. There is a square with side "S" on one of its side there exists a triangle such that side of the square is equal to base of the triangle. if the area of the square is equal to area of triangle then find the height of the triangle in terms of "S"

6. x and y both are on the same side of 0 in number line.

Col A: $x + y$

Col B: $|x+y|$

7. In a rectangular co-ordinate system point (5,5) is equidistant from pt (x,0) and pt (y,0)

cola : x intercept

col b: y intercept

8. $0.158 / 0.358 =$

similar question is asked... but with numerical changes....

1. $x < x^3 < x^2$

A. $-3/2$

B. $3/2$

C. $-1/2$

D. $1/2$

Ans : $-1/2$

2. Given a triangle ABC, AD is altitude and D is point on BC. Which of the angles are greater than 90?

A. Angle A

B. Angle B

C. Angle C

D. none of these

Ans: none of these

3. Given that $5(2^2 - 2^n) > 20$

Col a: n

Col b: 4

Ans: D

4. A man invites 7 people to party of which 3 of them are close friends and 4 are miscellaneous, he presents 2 gift after the party , find the probability of getting 2 gifts to his close friends?

5. If 3 is multiplied by 10 and 3 is added to the result.....and if this process is continued up to ten digits....like 3

3 3

3 3 3

3 3 3 3

..... so on till 10 digits. Find the sum of all 3's in 100th place?

6. There was series from 1 to n & n is odd... then randomly select a number. Find the probability that the number will be odd?

7. Given a fraction $2/7$, what is the 57th digit after decimal?

Ans: 5

8. $(x - 1/x)/(x + 1) = 99$. Find $(x - 1/x)/(x-1)$?

9. X and Y are positive integers and $X-2/10 = Y$

Col A: Units digit of Y

Col B: Tens digit of X.

10. Given a two figures, first figure contains a square with a circle of radius of the circle is 'r' inscribed in it and the area outside the circle(within the square) is shaded . Second figure contains a circle radius of 'r' with a square inscribed in it and the area outside the square(within the circle) is shaded.

Col A: Area of Shaded region in the first figure

Col B: Area of Shaded region in the Second figure

11. If $2n+1$ is the median of seven consecutive integers . What is the mean of the integers?

Ans: $2n+1$

12. Col A: $(5-1/4)$ square + $(5+1/4)$ square

Col B: 50

Ans: A

13. The slope of line XY is given as $-1/2$.

Col A: X intercept of Line

Col B: Y intercept of Line.

14. There is a code to be made of length of 5 in which it consists of 3 alphabets and 2 digits from 0 to

9. The alphabets 'a,e,i,o,u,y' are not allowed in the alphabets, so how many codes can be made. Reiterations are allowed in both alphabets and numeric.
Sol: $20 \times 20 \times 20 \times 10 \times 10$

15. If $q \cdot r^2 < 450$ and q and r are prime numbers greater than 3. What is the maximum possible value of r ?
A. 5
B. 11
C. 17
D. 13

from the given equation it can be seen that
 $(x-2)/10=y$;
 $(x-2)=10y$;
a few numbers satisfying them are $x=22, y=2$; $x=32, y=3$; $x=42, y=4$
so for all these it can be seen that
units digit of y = tens digit of x ;
so the option in my opinion is 'C'

friends reply if any error.

the num of odd num from 1 to n , if n is odd is $(n+1)/2$
so now selecting a odd no from n numbers is

$\text{prob} = (\text{no of favorable cases}) / (\text{total no of cases})$

$\text{prob} = ((n+1)/2)/n$

$= (n+1)/2n$

1. Given xy is not equal to 0 and x is not equal to y
and $x+y=0$
Col a: $x-y$
Col b: 0
Ans: D

2. The average height of 4 players is 6 feet and 6 inch. If the shortest one is of height 6 feet and 3 inch. What could be the height of the longest person. (Given 1 foot = 12 inches)
Question is similar to this.... with some numerical changes

3. Given 1 kilometer is 0.62 miles.. so how many kilometers is 50 miles?
Ans: 80.64km

4. If there are 'c' cartons and each carton has 'x' boxes which is being loaded in a truck in 'h' hours and 't' minutes.
Col a : The average time for loading the 'x' boxes of all cartons
Col b: $cx / (h+t/60)$

5. If $x < x^3 < x^2$. Then the value of 'x' is
a. $-3/2$

- b. $-1/2$
 c. 0
 d. $1/2$
 e. $3/2$
 Ans: b

6. If $m = 4^x + 4^x + 4^x + 4^x$, then what is m^2 ?
 Ans: $4^2(x+1)$

7. If a plane takes 't' seconds to cover a distance of 'y' km. Then how much time is required to cover 'x' distance (in HOURS)?
 Question is similar to this.... with some numerical changes.
 Ans: $(x*t) / (3600*y)$

8. Given two figures..... one is a circle inscribed in a square and other is a square inscribed in circle. If both have a common radius 'r' then find the area of the two? (It's a comparison question)

9. Find the area enclosed by the region in square units described by $0 \leq x \leq 5$ and $0 \leq |y| \leq 8$
 1) 40 2) 80 3) 160 4) 120

Quant:

1. If $x * n / (n+1) = y * (n+2) / (n+3)$
 Col A: x
 Col B: y

2. A rope of length 'x' ft is taken and is cut into two pieces, such that one piece is 5 ft more than the other.
 Col A: The length of smaller piece of rope
 Col B: $x - 5$ ft.

3. Given two line equations $x - 2y = -1$ and $3x - 4y = 3$ and these are the two lines of y-intercept and asked to find out the point between these two lines?
 A. (1, 0)
 B. (0, -1)
 C. (0, 0)
 D. (2, -1)
 E. (2, 1)

4. If $x^2 - x > 0$ and $|x| < 1$
 Col A: x
 Col B: $|x|$

5. A Number 'N' is a positive 3 digit number. If 'x' is in its hundredth place and 'y' is its units place then the number $(N - 100x - y)$ is divisible by which of the following number?
 A. 2
 B. 8
 C. 108
 D. 9
 E. 5

6. If 8 consecutive positive integers are taken and each integer is divided by 8, then
Col A: The average of the remainders of 8 consecutive integers when divided by 8
Col B: 3.5

7. If $4^{-x} = 1/256$ then $x = ?$

8. Given two lines equations $L = 5x - y = 3$, $M = 5x + y = -1$
Col A: Slope of L
Col B: Slope of M

9. Col A: $\sqrt{11} + \sqrt{17}$
Col B: $\sqrt{14} + \sqrt{14}$

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account has been
inactive for 90 days.
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10.

Col A: $-x+2$
Col B: 4

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account has been
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11.

What is the area of Quadrilateral PQRS?

12. If the probability of selecting certain thing is P_1 , P_2 , P_3 , P_4 . What is the probability of selecting each value exclusively?
A. $P_1 = 0.4$; $P_2 = 0.3$; $P_3 = 0.2$; $P_4 = 0.2$
B. $P_1 = 0.4$; $P_2 = 0.25$; $P_3 = 0.2$; $P_4 = 0.25$
C. $P_1 = 0.2$; $P_2 = 0.25$; $P_3 = 0.4$; $P_4 = 0.15$
D. $P_1 = 0.3$; $P_2 = 0.2$; $P_3 = 0.4$; $P_4 = 0.2$

MY possible answers are

- 1)D
- 2)B
- 3)C
- 4)B
- 5)---
- 6)D
- 7)4



9)B
10)D
11)55

About 5)

Hundredth = x
Tenth = Z (Parameter I set)
units = y

According to x,y and Z => $N = 100x + 10Z + y$

The number $(N - 100x - y) = 100x + 10Z + y - 100x - y = 10Z$

I think the answer is A and E. (10 can be divided by 2 and 5.)

Could anyone explain it? Many thanks.

how can u say ans for 10 th one is A

$-X+2=4$when $X=-2$

A...is answer when $X=-3,-4,-5$

B...is answer when $X=-1,0,1$

how can u say.... ans is A 😊😊😊😊

ans of 6th is A

the avg of remainder of 8consecutive no is4

if no is 1,2,3...8

remainder is 1,2,3....0

toatal is is 28 .divided by 8so remainder is 4

if u take any consecutive no. total of remainder is 28 only .

vikee patel

Quant:

1. $x^{(12)} - x^{(10)} + x^{(8)} - x^{(6)} > 0$, what is the possible value of x?

2. When $10^{(22)} + 1$ is divided by 11, what is the reminder?

3. If $ab \neq 0$, $a \neq b$, & $a^2 = b^2$ then
 Col A: $a+b$
 Col B: 0

4. If $(x - y) = \text{odd value}$ and K is an integer, which of the following is always odd?
 A. x
 B. y
 C. $k(x-y)$
 D. $(x-y)^2$
 E. $(x-y+k)$

5. Given set $A = \{1, 2, 3\}$ and set $B = \{1, 2, 3, 6, 7, 8\}$
 If a set M exists, such that set A is a subset of set M and set M is a subset of set B & set M is not equal to set A
 or set B . How many such possible sets exists?

- A. 4
- B. 5
- C. 6
- D. 8
- E. 9

6. Given a series $k, k-1, k+3, k+1, k+2$. Find the ratio of mean and standard deviation?
 A. $k+1$
 B. k
 C. 1
 D. $1/k$
 E. $1/(k+1)$

7. 53 students are divided into P and Q groups. P has 7 batches of n students each. Q has x students of 5 batches or 6 batches with x students in 5 batches and $x+1$ students in 6th batch

Col A: x
 Col B: n

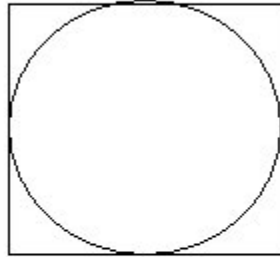
8. Sum of common prime factors of 51 and 204
 A. 20
 B. 21
 C. 23
 D. 24
 E. 25

9. A seller marks the price of an article 35% more of the wholesale price and he offers some discount. If he wish to get a profit of 21.5%. What is the percentage difference between marked price and selling price?
 A. 12.5
 B. 10
 C. 25
 D. 22.5
 E. 15

10. A circle is inscribed in a square such that the circle touches the edges of the square and



the difference of area of square and circle is given and asked to find the radius of the circle?



2)ans is 2

1).....

$$10^2 = 100 + 1 = 101/11 = \text{remainder is } 2$$

$$10^3 = 1000 + 1 = 1001 = \text{remainder is } 0$$

given that $10^{22} \dots 22$ is a even number so the remainder is 2.

3)D

given $a! = 0 \dots$ the condition is false. $0! = 1 \dots$ how the factorial value becomes 0.

if $a=0$ and $b=\text{some } X$ the first statement is true. but in second statement given $a! = b \dots$ so $b=1 \dots$

but in the third statement $a^2 = b^2 \dots$

so we cant estimate the values of A and B

4)D

take odd numbers 3,5,7,9.....

the squares are 9,25,49,81.....

5)E

the possible sets are $\{1,2,3,6\}\{1,2,3,7\}\{1,2,3,8\}\{1,2,3,6,7\}\{1,2,3,7,6\}$
 $\{1,2,3,6,8\}\{1,2,3,8,6\}\{1,2,3,7,8\}\{1,2,3,8,7\}$

6).....

7).....



A

the common prime factors for 51 and 204 are 17,3

$$17+3=20$$

9)B

let the wholesale price is 100

the marked price is 135.

if he want to get the profit of 21.5%.then the seling price is 121.5....(the discount is 10% that is $(10/100).135=13.5$).

$$135=100\%$$

$121.5=X\%$ by cross multiplicaton $X=90\%$

then the difference etween them is 10%

1....we hav to go with the options.....

6.....its impossible to get the answer in terms of..k.....am tryin...but its...goin beyond k...

7...d.....there r umpteen possible ways to diff betn any two batches....

10....s=2r.....this the trickhav to follow according to the...given values....

....

.....

can smone xplain...me5th question plz.....

" != " symbol denotes not equal to ..

so from the condition $ab \neq 0$; $a \neq b$;

$$a^2 = b^2$$

from the 3rd equation , $a = -b$

$$a+b=0$$

so both the columns are equal

Guys,

Set M can have the following :

1 1,2,3 (Nothing apart from A)

2 1,2,3,6,7,8 (Set B can have nothing apart from A and M)

3 1,2,3,6

4 1,2,3,7

5 1,2,3,8

6 1,2,3,6,7

7 1,2,3,7,8

8 1,2,3,6,8

So i guess answer should be 8.... any thoughts on this??

Guys,

Set M can have the following :

- 1 1,2,3,6
- 2 1,2,3,7
- 3 1,2,3,8
- 4 1,2,3,6,7
- 5 1,2,3,7,8
- 6 1,2,3,6,8

So i guess answer should be 6.... any thoughts on this??

mean : $k+1$

std. deviation : $\sqrt{2}$

Ratio : $k+1/\sqrt{2}$

im getting this as answer... any thoughts?

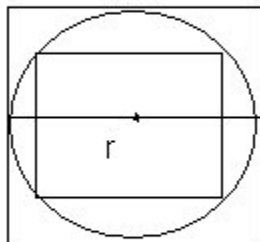
Quant:

1. Given that $a(3b-1) = 0$ and $a = 0$

Col A : b

Col B : $1/3$

2. Given a square which is inscribed in a circle and that circle is inscribed in another square. Find the ratio of the area of the inner square to the area of the outer square if the diameter of the circle is 'r' ?



3 . If a circle is inscribed in a square of side 4m. Find the area of the portions inside the square that was not occupied by the circle?

4. Col A : $\sqrt{5} * (\sqrt{3} + \sqrt{2}) + \sqrt{3} * (\sqrt{5} - \sqrt{2})$
Col B : 5

5. Col A : $2^{-1} + 1/2^{-1}$
Col B : $3^{-1} + 1/3^{-1}$

6. 10% of $\sqrt{597.63} = ?$

Admin,
drrajusgre.com

1....c
2.....1:2
3....16-4(pi)
4.....b
5.....b
6.....app...(sqrt 6)

4)for 4 th one.....
expand the given problem

$(\sqrt{5}*\sqrt{3})+(\sqrt{5}*\sqrt{2})+(\sqrt{3}*\sqrt{2})-(\sqrt{3}*\sqrt{2})$

=> $\sqrt{15}+\sqrt{10}+\sqrt{15}-\sqrt{6}$

if we take $3.5+3.1+3.5-2.5=7.6$more than 5....

ans is A.....

Quant:

1. Col A: $3^{(-8)} - 3^{(-9)} - 3^{(-9)}$
Col B: $3^{(-9)}$

2. If sum of 5 tests score is 120 and at least two of them are less than 20.

Col A: Average of 5 tests

Col B: Median of five tests

3. Given that $a_n = a_{n-1} + 3$ and $a_1 = 3$.

Col A: a_{100}

Col B: 300

(Here n , $n-1$, 1, 100 are suffixes)

4. If $20 < 4X < 28$ and $8 < x+4 < 11$

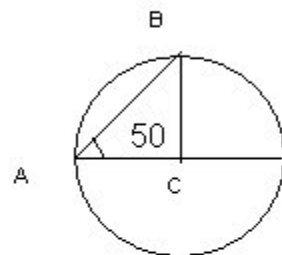
Col A: x

Col B: 5

5. Col A: $10\%(\sqrt{573.28})$

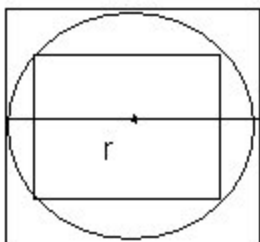
Col B: $\sqrt{57.328}$

6.



What is the degree of arc ABC?

7.



What is the ratio of Inner Square to the area of outer square if the diameter of the circle is 'r'?

8. $| -7 | + | 3 | - | -10 | = ?$

9. Given x is an integer such that $7x+4 < 8$

Col A: x

Col B: 1

10. If m, n, p are prime numbers greater than 10, find the number of factors of m, n, p including mnp and 1.

11. Given total number of students as 120 &

Number of students learning Spanish = 40

Number of students learning French = 60

Number of students learning Russian = 80

Number of students learning 2 languages = 50

Number of students learning all 3 languages = 10

Find number of students learning none of these languages?

12. Given $-1 < r < t < 0$

Col A: $r+rt^2$

Col B: -1

13. Given stock price at end of June is x, stock price increase in July is 10% and increase in august is again 10% . If September price = 70% of august price then

Col A: September price

Col B: $0.9x$

1. C
2. D
3. C
4. D
5. B
6. If they askin for angle ABC , then ans is 40 deg
7. $\frac{1}{8}$
8. 0
9. B
10. i feel they askin for factors of mnp includin m , n , p and 1 ..
in tat case the no of factores is 4
11. the total no of students cannot be equal to 120 .. it has 2 be atleast 130..
12. A
13. $A[\frac{1}{b}]$

- 1.c
- 2.d
- 3.c
- 4.d
- 5.b
- 6...i hav doubt so,cant solve it
7. $\frac{1}{2}$
- 8.0
- 9.b
- 10.i think the answr is 2..bcoz evry prime num has only two factors 1 and itself..but i dint understand ""including mnp""wat does it mean?
- 11.d
- 12.is it rt^2 or $(rt)^2$anyhow the answer is A
- 13.b...

if any mistakes plzz dont hesitate to reply me.....bye.

4.A

- 10.8
- 11.110
- 12.D
- 13.B

.If $20 < 4X < 28$ and $8 < x+4 < 11$

Col A: x

Col B: 5

ans is A: $x > 5$ & $x < 7$ put value in it
if 5.1 $20 < 20.4 < 28$,,,, $8 < 5.1+4 < 11$
if u think it 's wrong & D plz explain me
reply soon. my gre date is 15 july

vikee patel

3. taking intersection of two cases we will get x lies from (5,7) both excluded. Hence Ans is A.

6. Since AC and BC are radius of [the circle](#) both the sides are equal. It is an isosceles triangle with one of the equal angles equal to 50. Therefore the other angle will be 50.

10. If m, n, p are [prime numbers](#) greater than 10, find the number of factors of mnp including m,n,p and 1.
I feel this wud be the question.

In that case [writing](#) mnp in factorial form we get $mnp = m^1 * n^1 * p^1$.
m,n,p are prime factors. It is a property of ne number that if $m^a * n^b * p^c$ are its prime factors than total no. of divisors are given by $(a+1)(b+1)(c+1)$.

Applying this property here we get $2*2*2 = 8$ as the answer.

12. $r(1+t^2)$ is the form in which we can write it. $1+t^2$ is greater than 1. Take limiting case of $t=r=0$. In that case column A is 0. $A > B$

Take limiting case of $t=r=-1$. In that case column A is -2. Therefore D is the answer.

for ques 11 we use the formula==
Total-Neithr=A+B+C-(only two case)-2(all three case)
by putting crrect value we get the ans=10

Think of qs 11 as like this.

To find the no. of students learning atleast 1 language, we add all learning one language. This gives us $80+40+60 = 180$.

No we have counted the students who learn exactly 2 languages twice, while adding students of each category and people who learn 3 languages thrice.

Ordinary thinking wud suggest that we need to subtract once all people who have learned 2 languages and twice the no. of people learning all three languages.

However when we deduct the no. of people learning two languages we r actually subtracting the no. of people leaning 3 languages 3 times.

Hence when we perform $180 - 50 = 130$ we havent taken into account the all those people studying all three languages.

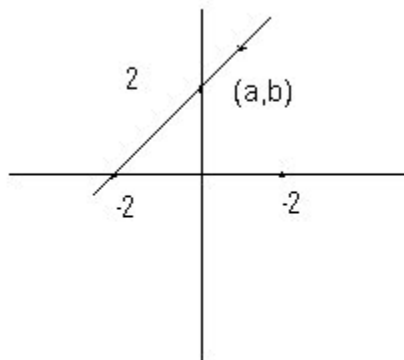
Hence we need to add once the no. of students learning all 3 languages. Therefore, we get the total no.

of students learning atleast 1 language as
 $130+10 = 140$.

Subtracting this from the total no. of students wud give us students learning neither of the 3 languages.

Quant:

1.



Col A: a
 Col B: b

2. What is the remainder when $10^{22}+1$ is divided by 11?

3. If $0 > 7/m > m/7$, then
 Col A: m
 Col B: 0

4.



If "p" is the point between "B" and "D".

Col A: BP

Col B: AB

5. Col A: $x^2 + (x+10)^2$

Col B: $x^2 + (x-10)^2$

6. Given [area and perimeter](#) of sector of a circle were given, and asked to find the radius?

7. What is the probability of getting a sum 8, when two dices were thrown?

8. A painting 4.5ft x 1.5ft is to be bordered with a 3inches wide wooden strip. What is the minimum length of the strip required to border the painting?

9. Given diagonal length and perimeter of a rectangle and asked to find the area?

1. D
 - 2.1
 - 3.B
 - 4.D
 - 5.D
 6. $2S/L$
 7. 5/18 not sure
 8. 1.5?? really need to know how to border it
 9. $(P^2 - 4D^2)/8$ if only one diagonal is given
2. 2
 7. 5/36
 8. 12 inches

8. 13

explntn:

$2 \times 4.5 = 9$ feet
 $2 \times 1.5 = 3$ feet
 $2 \times 2 \times 3 = 12$ inches = 1 feet
 $9 + 3 + 1 = 13$ feet

Quant:

1. Three machines can do a work in 4 hrs, 6 hrs, 8 hrs respectively. If all the 3 machines work together and complete the work, what is the part of the work done by the fastest machine?

2. If $W = 10^4$, $Y = 10^{-4}$ and $Z = (W+Y)/3W$, then the value of $Z = ?$

3. Col A: number of prime factors of 300
Col B: number of prime factors of 500

4. ColA: modulus (-7) + modulus(3) - modulus(-10)
ColB: 0

5. ColA: $3^{(-8)} - 3^{(-9)} - 3^{(-9)}$
ColB : $3^{(-9)}$

6. Given $a_n = a(n-1) - a(n-2)$, $a_1 = -5$ & $a_2 = 4$. For $n > 2$, what is the sum of first 100 terms of n. { i.e (sigma (a_n) from $n= 3$ to 103} .
(Here n, n-1, n-2, 1, 2, 100 are suffixes).

7. Given that, there are 500 people in a town and 50% own computers and 26% own computers with internet access. Whatt is the percentage of people who have computers and don't have access to internet?

8. Col A: Volume of a cube of surface area $150 \cdot y^2$
Col B: $125 \cdot y^3$.

9. There are 15 employes in company, the mean of salaries of the least played seven employes is given and the mean of the salaries of the highest payed employees is given
Col A: the median of the salaries of the 15 employes.
Col B: some value very close to the mean of the above given means was given.

10. There are 'X' number of students in a class. 'Y' number of them play football and 'Z' play basket ball. If 'N' number of them play niether then what is the number of students who play both?
(Question is similar to this with numerical values given in place of X, Y, Z & N)

11. Col A: 0.625% of 25
Col B: 6.25% of 25

1. ?
2. $2/3$
3. A
4. C
5. C
6. ?
7. 24
8. C
9. ?
10. ?
11. B

1) $6/13$

2) $(10^8 + 1)/(3 \cdot 10^8)$?

4) c

5) c

6) 0

7) 74%

? c

9) d

10) this one is easy anybody can solve it

let p plays both football and basketball

foot ball = y - p

basket ball = z - p

$x = (y - p) + p + (z - p) + n$

we can calculate p from this expression

11) b

hey if any thing wrong plz correct me, my id gretoefl8@gmail.com

Quant:

1. Col A: $(a - b)^3$
Col B: $(b - a)^3$

2. If $Z = 123^4 - 123^3 + 123^2 - 123$, then what is the remainder when 'Z' is divided by 122.

- A. 0
- B. 1
- C. 2
- D. 3
- E. 4

3. If the product of 1 to n inclusive is divisible by 990 then

Col A: n

Col B: 9

4. Given a bag which contains **red and black** marbles and red **marbles** are 5 times black marbles. If we pick 5 marbles randomly, without replacement, then Col A: Probability of getting red marbles col b: **Probability** of getting black marbles

5. What are the number of five digit numbers that can be made using 7, 6, 5, 4, 3, 2, 1 without repetition of any digit in a number?

6. If $ab = 3$, $bc = 2$ and a, b, c lie on a same line. What is the value of $ac = ?$

7. Given N is a positive odd integer. If the number in the tens digit is double the digit at the units place then the value of N ?

- A. $n > 90$
- B. $30 < N < 90$
- C. $N > 50$
- D. $30 < N < 50$

8. If $40 \cdot 75 \cdot 160 = 3 \cdot 4^m \cdot 5^k$

Col A: m

Col B: k

9. A number between 10 and 100, when divided by 4, 6 OR 7 leaves a **remainder** of 2.

Col A: Remainder when divided by 11

Col B: 9

10. Given a and b are integers and $a-b$ is even. Which of the following is even?
Ans: $a^2 + b$ (Given by exam taker)

11. Given that perimeter of area $X >$ Perimeter of area Y

Col A: Area of X

ColB: Area of Y

12. Given $8 < 2x < 14$ and $9 < x+4 < 16$

Col A: x

Col B: 6

13. Given $4x-1 > 9$

Col A: x

Col B: 3

14. Given that $-3 \leq x \leq 6$ and $-10 \leq y \leq 9$. What is the greatest possible value of $-(x^2) + y^4$?

- A. 10036
- B. 10009
- C. 10,000
- D. 1000

15. Given a circle inscribed in square and the diagonal length of square is given as $16\sqrt{2}$. Find the radius of the circle?

16. If $X^2 + 2x + 10 = y$ then what is the value of $x^2 + 2x + 25$ in terms of y ?

17. A bag contains 3 types of balls. Probability of selecting 2 types of balls is given and asked to find the probability of selecting 3rd type of ball when one attempt is made for selection?

- 1. D
- 2. A
- 3. B
- 4. A
- 5. 😊
- 6. 5
- 7. D
- 8. C
- 9. 😊
- 10. $a^2 + b$
- 11. A
- 12. D
- 13. D
- 14. C
- 15. $4\sqrt{2}$
- 16. $y + 15$
- 17. ?

please anyone tell me if its wrong 😊?😊

diagonal of square is $16\sqrt{2}$

so one side of square has calculated by Pythagorean formula...

$$a^2 + b^2 = c^2$$

$$2a^2 = 16^2$$

$$= 256$$

$$a^2 = 128$$

$$\text{so } a = 8\sqrt{2}$$

its diameter of circle so radius of circle is $4\sqrt{2}$

now u please explain me ans of question 9

hey the diagonal length is $16\sqrt{2}$ as per the question ..not 16..if u solve it comes to 8.

9.C

list out the multiples of 7 till 100 and add 2 to all of them.
the list will be 16 23 30 37 51 58 65 72 79 86 93
now cancel out all those which are divisible by 4 and 6.
so list comes down to 23 37 51 58 65 79 86 93

now divide by 4 or 6 or 7 and check which one has remainder 2
it will come down to 86
just basic elimination....

diagonal is $16\sqrt{2}$

side of square be A
 $\sqrt{A^2 + A^2} = 16\sqrt{2}$
 $A \cdot \sqrt{2} = 16\sqrt{2}$
 $A = 16$
 $A = 2 \cdot r$
 $r = 8$ which is the radius of the given circle...
:lol:

[quote="diablorox"]diagonal is $16\sqrt{2}$

side of square be A
 $\sqrt{A^2 + A^2} = 16\sqrt{2}$
 $A \cdot \sqrt{2} = 16\sqrt{2}$
 $A = 16$
 $A = 2 \cdot r$
 $r = 8$ which is the radius of the given circle...
😄[/quote]

ohhhhhhh ya you r right i think its 16
then ans. is 8 😄😄

3)A , i think . if $n=11$.
(1.2.3.....8.9.10.11)/990 is exactly divisible,since $990=9 \cdot 10 \cdot 11$.

the nos given are 1-7.
we need a 5 digit no right..
so consider the units place: the units place can be filled in 7 ways
now comin to tens place: it can be filled in 6 ways coz the no is not repeated it can be done in 6 ways
so the soln is $7 \cdot 6 \cdot 5 \cdot 4 \cdot 3$

Quant:

1. Given that radius and height of a right circular cylinder B are $1/2$ the radius and height of cylinder A.

Col A: Volume of Cylinder A

Col B: 4 times the Volume of cylinder B

2. Col A: 25% of 60

Col B: 60% of 25

3. ColA: modulus (-7) + modulus(3) - modulus(-10)

ColB: 0

4. Col A: $\sqrt{64/100}$

Col B: $16/25$

5. Given a circle inscribed in a square and the diagonal length of the square is given as

$4\sqrt{2}$. Find the area of the circle?

6. If $x > 1$, then

Col A: x^{14}

Col B: x^{15}

7. Given the sector angle measure of a circle as 90. If the radius of the circle is given as 's', then find area of the sector?

8. Given set $A = \{1, 2, 3\}$ and set $B = \{1, 2, 3, 6, 7, 8\}$. If a set M exists, such that set A is a subset of set M and set M is a subset of set B & set M is not equal to set A or set B. How many such possible sets exists?

9. If $x > 50$, then the value of the expression " $2 - 1/x$ " is closest to which of the following option?

A. 0

B. 1

C. 2

D. 3

E. 4

10. In a series of numbers from 1 to 40.

Col A: Sum of all odd integers

Col B: Sum of all even integers

11. If $A@B = A^2 + B^2 - 2AB$, then what is the value of $3@1/2$?

12. If $(x - 25) * (x + 15) / (x + 25) * (x - 15) = 1$ then the value of $x = ?$

- A. 15
- B. -15
- C. 25
- D. -25
- E. none

13. Given the perimeter of a rectangle as 80m. If the ratio of length and breadth i.e $l : b = 3 : 2$ then the area of the rectangle is?

14. Col A: $2^0 * 3^0$

Col B: 0

Quant:

1. $2^{-1} + 1/(2)^{-1} + (3)^{-1} + 1/(3)^{-1} = ?$

2. A number when divisible by 4, 6 or 7 leaves remainder by 2. What is the remainder, when the same number is divided by 11?

3. Given that $a(3b-1) = 0$ and $a = 0$. Find the value of b ?

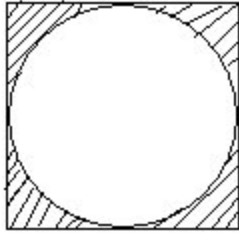
4. If $(x+1/x) / (1+1/x) = 99$ then Find value of $(x-1/x)/(1+1/x) = ?$

5. Given that the perimeter of rectangle A > perimeter of rectangle B

Col a: Area of rectangle A

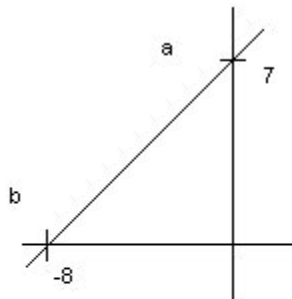
Col b: Area of rectangle B

6.



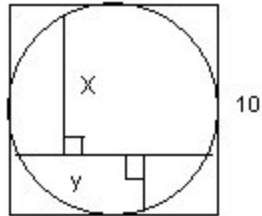
If the area of the shaded region is 1sq.m then what is the area of the circle?

7.



If the x-intercept of the line 'a' is given as 7 and y-intercept 'b' of the line is given as -8. Find the slope of the line?

8.



What is the circumference of the circle?

9. Given that radius and height of a right circular cylinder B are $\frac{1}{2}$ the radius and height of cylinder A.

Col A: Volume of Cylinder A

Col B: 4 times the Volume of cylinder B

10. Given N is a positive odd integer between 22 and 99. If the number in the tens digit is double the digit at the units place then the value of N?

A. $70 < N < 90$

B. $90 < N < 99$

C. $50 < N < 70$

D. $30 < N < 50$

11. There are 15 employees in company, the mean of salaries of the least paid seven employees is given and the mean of the salaries of the highest paid employees is given

Col A: the median of the salaries of the 15 employees.

Col B: some value very close to the mean of the above given means was given.

12. Col A: $10\% (\sqrt{573.28})$

Col B: $\sqrt{57.328}$

13. When $10^{(22)} + 1$ is divided by 11, what is the remainder?

14. If ab is not equal not 0, a is not equal to b , & $a/b = b/a$

Col A: $a+b$

Col b: 0

15. If $(x - y) = \text{odd value}$ and K is an integer, which of the following is always odd?

A. x

B. y

C. $k(x-y)$

D. $(x-y)^2$

E. $(x-y+k)$




16. Given a series $k, k-1, k+3, k+1, k+2$. Find the ratio of mean and its median?

- A. $k+1$
- B. k
- C. 1
- D. $1/k$
- E. $1/(k+1)$

17. A seller marks the price of an article 35% more of the wholesale price and he offers some discount. If he wish to get a profit of 21.5%. What is the percentage difference between marked price and selling price?

- A. 12.5
- B. 10
- C. 25
- D. 22.5
- E. 15

18. What is the value of $| -7 | + | 3 | - | -10 | = ?$

- 1. $35/6$ or 5.83
- 2. 9
- 3. 
- 4. $2/97$ i think soo
- 5. a
- 6. $2/(2 - \text{squ pi})$
- 7. 
- 8. 10π
- 9. a
- 10. d
- 11. 
- 12. b
- 13. 2
- 14. d
- 15. d
- 16. b
- 17. a
- 18. 0

any thing ans is wrong tell me

1 if an integer is defined as $(-1)^n$ which of the folling is applicable for integers a and b

- 1 $a+b = a*b$;
- 2 $(a+b)=(a)+(b)$;
- 3 $(a*b)=(a)*(b)$;

- A none;
- B both 1 and 2;
- C 1,2,3;
- D only 2

2 col a

$\sqrt{2/5}$

col b

1-3/5

3

$(14)^2 + (7)^2)^2 - ((14)^2 - (7)^2)^2 =$

4

a circle is inscribed in a square the diagonal length of the square is $16\sqrt{2}$ radius of the circle is

5

series is 1,1,1,1,1

col a

standard deviation of the series

col b

1

6 di

team name score

team1 17

team2 31

team3 34

team4 41

etc(i dont remember the score of team5)

there are 5 judges each may give score varying from 1 to 10

how many teams will be awarded a score of 7 or greater by atleast one judge

Quant:

1. In a buffet you can choose a possible 2 out of 4 choices of dish A and 4 out of a possible 5 of dish B. How many different combinations can you choose from?

2. Col A : standard deviation of a set of numbers - 5, 5 , 8, 14, 18

Col B: Standard deviation of - 6, 6 8, 14, 16

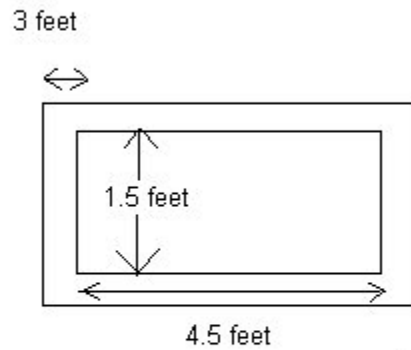
3. Given that the perimeter of plot of land A > perimeter of plot of land B

Col a: Area of plot of land A

Col b: Area of plot of land B

4. If $(x+1/x) / (1+1/x) = 99$ then Find value of $(x-1/x)/(1+1/x) = ?$

5.



Given the length and breadth of the painting on the rectangular wooden board is 1.5feet and 4.5 feet. If the edge width left on wooden board is 3 feet, then what is the total area of the wooden board?

6. Col A: 10% (sqrt (573.28))

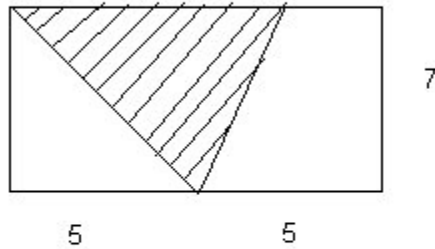
Col B: sqrt (57.328)

7. If ab is not equal not 0, a is not equal to b , & $a/b = b/a$

Col A: $a+b$

Col b: 0

8.



What is the area of unshaded region?

9. When a pair of dice are rolled. What is the probability that the sum of numbers will be 8?

10. What is the value of $| -7 | + | 3 | - | -10 | = ?$

11. A point $(-1, -2)$ is on a circle with centre $(1, 2)$. What is the circumference of the circle?

- A. π
- B. 2π
- C. $4\pi(\text{root } 5)$
- D. 4π

12. A circle is given with a sector shaded. The area of the sector is given as $3\pi/2$ and the length of the arc is given as π . What is the radius of the circle?

13. Given $8 < 2x < 14$ and $9 < x+4 < 16$

Col A: x

Col B: 6

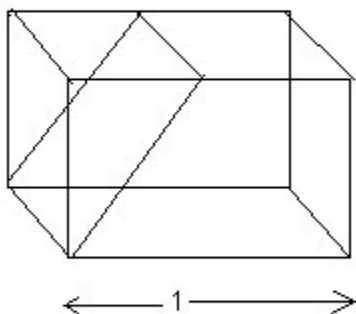
14. Col A: $3^{(-8)} - 3^{(-9)} - 3^{(-9)}$

Col B: $3^{(-9)}$

15. Given $a_n = a(n-1) - a(n-2)$, $a_1 = -5$ & $a_2 = 4$. For $n > 2$, what is the sum of first 100 terms of n . { i.e. $(\sum a_n)$ from $n= 3$ to 103 }. (Here $n, n-1, n-2, 1, 2, 100$ are suffixes).

- A. -5
- B. 4
- C. 1
- D. 9
- E. 13

16.









What is the ratio of area of cube to the area of rectangle?

Admin,
drrajusgre.com

1. 30
2. 😞
3. d
4. ?
5. 72
6. b
7. c
8. ?
9. $1/6$
10. 0
11. $2\pi(\sqrt{5})$
12. 3

- 13. d
- 14. c
- 15. ?
- 16. $12\sqrt{5}$

- 1. 720
- 2. a
- 3. a
- 4. -1
- 5. 78.75
- 6. b
- 7. d
- 8. 
- 9. $5/36$
- 10. 0
- 11. 8π is correct
- 12. 
- 13. d
- 14. c
- 15. 
- 16. 

- 1. 30
- 2. a
- 3. d
- 4. 101
- 5. 78.75
- 6. b
- 7. c
- 8. 
- 9. $5/36$
- 10. 0
- 11. c
- 12. $21/22$
- 13. d
- 14. c
- 15. 13
- 16. 

GRE is not everything in your life

but

It is something in your life

$$s.d = \sqrt{d^2/n}$$

$d = x - a$ x is each elt , a is the mean of the elts

n is the number of elts

GRE is not everything in your life

but

It is something in your life

- 1) 30
- 2) A
- 3) A
- 4) 😊
- 5) 78.75
- 6) B
- 7) C
- 8) 😊😊
- 9) TOTAL POSSIBILITIES: (2,6),(6,2),(3,5),(5,3),(4,4) = 5 CHANCES
TOTAL CHANCES = 6×6
SO ANSWER IS $5/36$.
- 10) 0
- 11) $4\pi(\sqrt{5})$ DAMN SURE
- 12) 3 PAKKA
- 13) D
- 14) C
- 15) I AM GETTING 1 AND 13 CONFUSED....
- 16) 😊

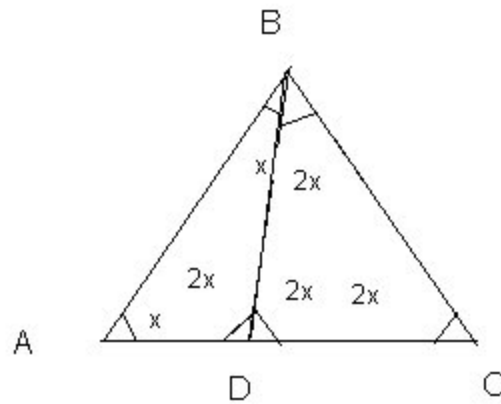
hari Prasad

Quant:

1. If $a_1 = 2$ and $a_{n+1} = (a_n - 1)^2$ where $n, n+1, n-1$ are suffixes. Find a_{17} ?

- A. 1
- B. -2
- C. 4
- D. 0
- E. -1

2.



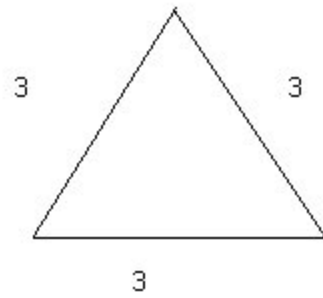
Note: Here x , $2x$ are angles of the triangle

Col A: Area of triangle ADB

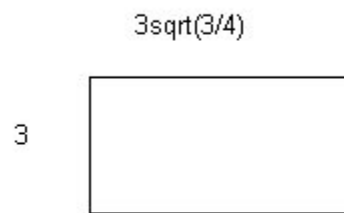
Col B: Area of triangle BDC

3. Given that there are six teams in music Quiz and their respective scores are 31, 24, 14, 10, 43 & 47 and there are 5 judges for this quiz. What is the minimum number of teams which must get 7 or more than 7 score from any one of the judge?

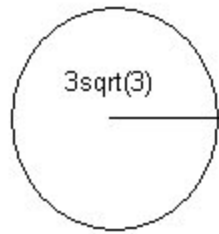
4. Given a triangle



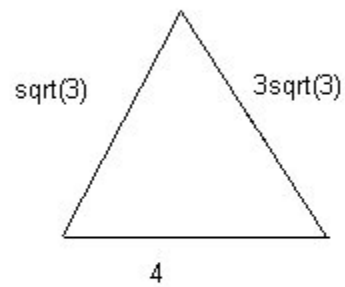
Which of the following diagrams will have the same area?
A.



B.



c.

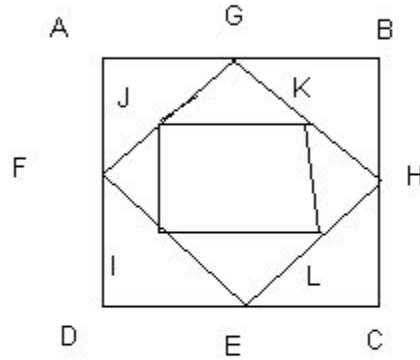


And so on.....

5. If $4^K > 9$, then

Col A: K
Col B: 3

6.



If the side of the square ABCD is 8 then what is the side length of the inner square IJKL?

7. Given N is a positive odd integer between 22 and 99. If the number in the tens digit is double the digit at the units place then the value of N ?

- A. $70 < N < 90$
- B. $90 < N < 99$
- C. $50 < N < 70$
- D. $30 < N < 50$

8. Given $8 < 2x < 14$ and $9 < x+4 < 16$

Col A: x

Col B: 6

9. Col A: $2^{-1} + 1/(2)^{-1}$

Col B: $(3)^{-1} + 1/(3)^{-1}$

10. Given $a_n = a_{(n-1)} - a_{(n-2)}$, $a_1 = -5$ & $a_2 = 4$. For $n > 2$, what is the sum of first 100 terms of n . { i.e. $(\sum a_n)$ from $n = 3$ to 103}. (Here n , $n-1$, $n-2$, 1, 2, 100 are suffixes).

- A. -5
- B. 4
- C. 1
- D. 9
- E. 13

11. In the sequence 3,33,333,3333..... What is the sum of hundred place digits?

12. Given length and area of arc of the circle and asked to find radius of the circle?

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- 1)D
- 2)D
- 3) ?
- 4)area of triangle $\frac{\sqrt{3}}{4} \cdot 9$ and check for the options
- 5)A
- 6)2
- 7)C
- 8) ?
- 9)B
- 10) ?
- 11) ?
- 12)length of arc= $\frac{\theta}{360} \cdot \pi \cdot r^2$

please tell me if any mistakes 😊

- 1. D
- 2. D
- 3. ?
- 4. ?
- 5. D
- 6. 4
- 7. C
- 8. D
- 9. B
- 10. C
- 11. ?
- 12. ?

please explain the first question

how do you get 0

GRE is not everything in your life

but

It is something in your life

give $a_1=2$ and $a_{n+1}=(a_n-1)^2$

$$a_2=a_1+1=(2-1)^2=1$$

$$a_3=a_2+1=(1-1)^2=0$$

$$a_4=a_3+1=(0-1)^2=1$$

so $a_{17}=0$

but it s given that

$n, n+1, n-1$ are suffixes ..

how could you subtract 1 from a_n ???

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but

It is something in your life

1.

(Here $x, 2x$ & $4x$ are angles of the triangle)

Col A: Area of triangle ADB

Col B: Area of triangle BDC

2. Given $p \cdot n! = 0$ & $p^2 = 5n$

Col A: n

Col B: 3

3.

If the area of the shaded region is 75% of the area of the square then find the value of x ?

4.

Col A: Area of [the triangle](#) ABC

Col B: 24

5.

Col A: Radius of the circle

Col B: $(x+y)/2$

6. Col A: $\text{Sqrt}(78 \cdot 79 \cdot 80 \cdot 81)$

Col B: 6400

7. Col A: A and B work together completing a task in x days. If A works y days more than B then how many days did B work?

Col B: $(x-y)/2$

8. $[\text{Sqrt}(200) - \text{Sqrt}(\text{😄}) - \text{Sqrt}(2)] = ?$

9. Hanna teaches biology for a group 53 students. She can divide them into two batches P and Q. P has 7 batches of n students each. Q has x students of five batches; or six students with y students in 5 batches and (y+1) students in 6th batch.
Col A: x
Col B: n

1. dnt knw
2. B
3. $45/2$
4. D
5. D.
6. B
7. C
8. $7\sqrt{2}$
9. D. not sure because is not clear

1.

(Here x, 2x & 4x are angles of the triangle)
Col A: Area of triangle ADB
Col B: Area of triangle BDC

2. Given $p.n! = 0$ & $p^2 = 5n$
Col A: n
Col B: 3

3.

If the area of the shaded region is 75% of the area of the square then find the value of x?

4.

Col A: Area of the triangle ABC
Col B: 24

5.

Col A: Radius of [the circle](#)
Col B: $(x+y)/2$

6. Col A: $\sqrt{78 \cdot 79 \cdot 80 \cdot 81}$
Col B: 6400

7. Col A: [A and B](#) work together completing a task in x days. If A works y days more than B then how many days did B work?
Col B: $(x-y)/2$

8. $[\sqrt{200} - \sqrt{\text{😬}}] - \sqrt{2} = ?$

9. Hanna teaches biology for a group 53 students. She can divide them into two batches P and Q. P has 7 batches of n students each. Q has x students of five batches; or six students with y students in 5 batches and (y+1) students in 6th batch.

Col A: x
Col B: n

for right angle triangle the sides are $x, 2x$ and $x\sqrt{3}$
so the sides are $6, 3$, and $\sqrt{3}$
so $\frac{1}{2} \cdot 3\sqrt{3} \cdot 3 = 19.5$ something which is less than 24
so answer is b

Quant:

1. $0 < 7/m < m/7$

Col A: m
Col B: 7

2. Cube root of 150 lies in the range of?

3. Given that AB is a side of triangle and CD diameter of a circle. If $AB = CD$, then

Col A: Perimeter of triangle
Col B: Circumference of circle

4. There 20 students in a class, half of the students are boys. If 7 members should be selected out... and of which if 6 are girls find the probability that the 7th member is also a girl?

5. Given 6 balls, numbered as 1, 2, 3, ..., 6. If two balls are picked from them, then what is the probability that their sum is 8?

6. Col A: $\sqrt{3} / \sqrt{2} + 5$
Col B: $\sqrt{2} / \sqrt{3} + 5$

7. A cuboid was given with some boxes having $l = 9$, $b = 3$ and $h = 3$. Find the total surface area of the cuboid?

8. If the total strength of a class is 35 and ratio(girls:boys) is 3:4, what is the difference between number of girls and boys in the class?

9. Col A: Standard deviation of 1, 2, 3, 4
Col B: half the Standard deviation of 3, 4, 6, 7.

10. Given that x is not equal to 0
Col A: $x^{(-x)} / |x|$
Col B: $x^{(-x)}$

11. Given a equation of circle $x^2 + y^2 = 49$ with two points A(4a, 3) and B(0, -b) on the circle.
Col A: Distance between points A & B
Col B: 12

12. Col A: $\sqrt{11} + \sqrt{17}$

Col B: $\sqrt{14} + \sqrt{14}$

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drrajusgre.com

1. A
2. 5 and 6
3. D
4. is it $10C7/20C7$?
5. is it $2/6C2$?
6. A
7. 126
8. 5
9. A
10. D
11. D
12. A

can any1 confirm?

I got the answer of 7th question as 54

also i m confused about when we have to consider +ive square roots and when -ive one....

as we will consider both the cases then in comparison problems answers get changed

also i got answer of 11 as B

the points i got are approximately (6.4 , 3) or (-6.4 , 3) and (0 , -7)

sorry answer for 7th is 126

i misinterpreted the problem

plz cinform 11 th

and give some suggetions abt +ive or - ive square roots

Quants:

1. Given a rectangle of breadth 2m and perimeter 32m, and this rectangle is divided vertically with two vertical lines(making it into 3 boxes). If the length of first & second box is 5 and third is 'x', find the area of the rectangle?

2. Col A: $(2)^{-1} + (4)^{-1} + (6)^{-1}$

Col B: $1 + (12)^{-1}$

3. Given 'n' is a positive integer. What is the least value of n, such that the product $12n$ should be a perfect square of some integer?

4. Col A: $r + s + s$

Col B: $r + r + s$

(Question is exactly given like this... without any specifications for 'r' and 's' values: hence answer is "Cannot be determined").

5. If the diameter of a circle is $7r + 4$. What is the radius?

6. Given that the range of 6 consecutive positive numbers is 6.8 and of 7 consecutive numbers is 13.2. If none of these numbers in the two groups are same, what would be the range of the 13 numbers?
(Question is similar to this.. with slight numerical changes)

7. Given that 'm' and 'h' are two positive integers. If $10^{50} \cdot m + h$ is divisible by 9, then

Col A: Remainder when 'm+h' is divided by 9 is

Col B: 5

8. What is the remainder when $123^4 - 123^3 + 123^2 - 123$ is divided by 122?

9. Given $xy = 0$

Col A: $(x+y)^2$

Col B: $(x-y)^2$

10. A Pentagon is given with one angle known and other angles in terms of x and asked to determine x?

11. If $-1 < x < 0$, then the median of -1, 1, x, x^2 , x^3 is?

1. 4
2. b
3. 3
4. d
5. $(7r+4)/2$because here we doesnt know r is radius or what?
6. 0.8 to 13.2
7. no
8. remainder is 0.
9. c
10. ok i can solve it.
11. x^2

V!\$h@l

hi friends this is girish ,i need the solution for the following questions which appeared on jun 17 quants database..kindly help me out..the questions are.

1) Given that the range of 6 consecutive positive numbers is 6.8 and of 7 consecutive numbers is 13.2. If none of these numbers in the two groups are same, what would be the range of the 13 numbers?

2) Given that 'm' and 'h' are two positive integers. If $10^{50} \cdot m + h$ is divisible by 9, then Remainder when 'm+h' is divided by 9 is -----.

3) What is the remainder when $123^4 - 123^3 + 123^2 - 123$ is divided by 122?

hi vishal,

my ans:

1. i think it is 28, as we have to find the area not the value of x.
2. b is correct according to me also
3. 3
4. d
5. $(7r+4)/4$
6. do not know how to solve it, please explain how did you get answer?
7. do not know how to solve it
8. (123^3+123)
9. c
10. no need to solve
11. x^2

Quants:

1. Given a rectangle of breadth 2m and area 26sq.m and this rectangle is divided vertically with two vertical lines(making it into 3 boxes). If the length of first & second box is 5 and third is 'x', then what is the value of 'x'?

2. There was a survey of 500 persons. Each person was given some questions, and for each question they can answer either "YES" or "NO". If 410 persons from the group answered "YES" for the first question, 220 of the group answered "YES" for the second question and if 'n' is the least number of persons who answered "YES" to both the questions, what is the value of 'n' provided if all the 500 persons answered both the questions?

3. Given one pentagon with angles x, x, x, $2x-90$ and 80 and was asked to find x value?

4. Given three points of a triangle as (0,0), (x,0) and (4,3). If the area is given as 12, then

Col A: x

Col B: 8

5. Given $x < y < 0$

Col A: xy

Col B: y-x

6. If the average of 'p' numbers in a list is 62 and the average of 'q' numbers in a list is 65, and if the average of 'p+q' is 85, then the value of p/q is?

7. Given a circle, with another circle inscribed in it and the distance between bigger circle and smaller circle was shaded. If the bigger circle's radius was twice that of smaller circle.

Col A: area of bigger circle - area of smaller circle (shaded part)

Col B: area of smaller circle.

8. Given two line equations $5x - y - 3 = 0$ and $5x + y + 3 = 0$.

Col A: Slope of the first line

Col B: Slope of the second line.

1)---3
2)---?
3)---106
4)---B
5)---A
6)---((-20)/(23))
7)---A
🤔---A

🤔🤔🤔🤔🤔🤔

hey guys plz chek my ans...if u found and mistakes...correct it....

sorryguys.....for (5).....ans isD

take y as -100 and x as -0.3

for second ex ..take y as -100 and x as -2 🤔

1----3
2
3----110
4----C
5----D
6
7----C (the shaded part is between the bigger n smaller circle)
8----A

i doubt if $p/q = -20/23$

'p' and 'q' are both +ve numbers.....'p' is the total numbers in a list and so is 'q'

so when both are positive their ratio should be +ve as well..

i guess thr's something missing in the data....either one of the set of the nos. or their total shud have been given to solve the prob

Rectangle prob:

whn cut vertically the length 'L' wud get divided into 3 parts which is given as 5,5,x and the breadth 'B' is 2

hence area

$$26 = (5+5+x) * 2$$

$$13 = 10 + x$$

$$x = 3$$

ANS FOR & TH QUESTION

given data is
bigger circle's radius was twice that of smaller circle

let X is smaller circle radius
area of smaller circle is $\pi (X^2)$
bigger circle radius is 2X

area of bigger circle is $4\pi (X^2)$

area of shaded region is $(4\pi(X^2)) - (\pi(X^2)) = 3\pi(x^2)$

area of smaller circle is less.....so answer is A

1. X=1
2. I THINK ITS 220..... NOT SURE
3. X=110
4. B
5. D
6. ?
7. A
8. A

Quant:

1. Col A: $\sqrt{28} * \sqrt{252}$
Col B: 84

2. If the Arithmetic mean of a list of 65 items is 'p' and arithmetic mean of a list of 92 items 'n'. When the two lists are combined the average mean is 84 then what is the value of p/n?

3. Given that $a * b > 0$
Col A: a/b divided by c
Col B: a divided by b/c

4. Given two lines equations M and N as $3x^2 + y - 3 = 0$ & $3x^2 - y + 3 = 0$
Col A: slope of line M
Col B: slope of line N

5. Given a solution having 5% salt concentration. To the 500cc of above solution how much amount of a 3.5% salt concentrated solution should be added in order to get 4% salt solution.?

6. Given $h > 0$
Col A: h^2
Col B: $1/h^2$

7. A salesman gets 12% commission on the sales up to \$ 500 and he gets 20% commission on the further sales amount on that day. If the salesman's total commission is \$380 on that day, then how much amount did he sell on that day?

8. Given that radius of circle M is $\frac{1}{3}$ of the radius of circle N, then

Col A: 3 times the area of circle M

Col B: area of the circle N

9. Given two cuboidal tanks M and N with sides of M as r, s and t and sides of N as u, v and w. If the sides r and s are 10% less than u and v, and t is 20% larger than w, then

Col A: Internal volume of tank M

Col B: Internal volume of tank N

10. A number line is given in which three points are given as n, n+2, -n+2 on a number scale.

Col A: -n+2

Col B: 4

Admin,

drarajusgre.com1. C

2. seems pretty similar to the earlier thread - cant get to a soln

3. D

4. its a second degree equation, how can it be a line? in that case wherz the qstn of a slope????

5. cant figure out

6. D

7. 2100

8. B

9. B

10. D

1. C

2. (incorrect or incomplete data)

3. D

4. D

5. 1000 cc

6. D

7. \$2100

8. B

9. B

10. D

Current solution: 500cc

Salt amount: $.05 \times 500 = 25\text{cc}$

Let 'A' be the amount of new solution added

Salt amount in new solution = $0.035 \times A$

According to the condition, after adding amount 'A' in 500cc, the final solution has 4% salt in it so..

amount of salt in 500cc + amount of salt in 'A' = 4% of the mixture (the final solution)

$$25 + 0.035 A = .04 \times (500 + A)$$

$$2500 + 3.5 A = 4 \times (500 + A) \dots\dots\dots (\times 100 \text{ both sides})$$

$$2500 + 3.5 A = 2000 + 4 A$$

$$500 = 0.5 A$$

$$A = 1000\text{cc}$$

Hence 1000cc of 3.5% salt concentrated solution should be added

Quants:

1. Given a equation of circle $x^2 + y^2 = 49$ with two points A(4a, 3) and B(0, -b) on the circle.

Col A: Distance between points A & B

Col B: 12

2. In a survey of 200 people, 15% don't have driving licence, 10% were charged for parking ticket one or more time and 78% neither had licence nor were charged for parking ticket one or more time. What are the number of people who don't have licence and also were charged for parking ticket one or more time?

3. What is remainder when $123^4 - 123^3 + 123^2 - 123$ is divided by 122?

4. Given that the range of 6 consecutive positive numbers is 6.8 and of 7 consecutive numbers is 13.2. If none of these numbers in the two groups are same, what would be the range of the 13 numbers?

5. Given a pentagon, with its five angles mentioned as x, x, x, 2x-90, 80. Find x?

6. Given two lines equations M and N as $3x^2 + y - 3 = 0$ & $3x^2 - y + 3 = 0$

Col A: slope of line M

Col B: slope of line N

7. Col A: $(0.9/1.1)^2 + (1.1/0.9)^2$

Col B: 2

8. A salesman gets 12% commission on the sales up to \$ 500 and he gets 20% commission on the further sales amount on that day. If the salesman's total commission is \$380 on that day, then how much amount did he sell on that day?

9. If the Arithmetic mean of a list of 65 items is 'p' and arithmetic mean of a list of 92 items 'n'. When the the two lists are combined the average mean is 84 then what is the value of p/n?

10. Given that $x > y$ and $xy < 0$.

Col A: x^7

Col B: $x^3 * y^4$

In a survey of 200 people, 15% don't have driving licence, 10% were charged for parking ticket one or more time and 78% neither had licence nor were charged for parking ticket one or more time. What are the number of people who don't have licence and also were charged for parking ticket one or more time?

soln:

let A be set of ppl not having licenses only, $n(A - (A \cap B)) = 30$

B is set of ppl arrested one or more time only, $n(B - (A \cap B)) = 20$

max ppl not having licenses ***AND*** not arrested can be 30

so assuming that 78% do not have license ***OR*** were not arrested

$n(A \cup B') = 156$ (not havin license(A) OR not arrested once or more(B'))

draw standard Venn diagram

$n(A' \cup B') = 156 - 30 = 126$ (having license(A) or not arrested (B'))

we know,
 $(A \cap B)' = A' \cup B'$. ($\cap \Rightarrow$ intersection)
hence, $n(A \cap B)' = 126$
 $n(A \cap B) = 200 - 126 = 74$

Ans = 74 (ppl not havin license and arrested once or more)
IS THE ANSWER CORRECT?

6. Given two lines equations M and N as $3x^2 + y - 3 = 0$ & $3x^2 - y + 3 = 0$
Col A: slope of line M
Col B: slope of line N

Why are the equations of lines represented by quadratic equations? Doesn't make much sense. This question is repeated.
Please clarify

9. If the Arithmetic mean of a list of 65 items is 'p' and arithmetic mean of a list of 92 items 'n'. When the two lists are combined the average mean is 84 then what is the value of p/n?

SOLN

say $p = \text{sum1}/65$ hence $\text{sum1} = 65p$
also $q = \text{sum2}/92$ hence $\text{sum2} = 92q$

now, $\text{avg} = (\text{sum1} + \text{sum2}) / (65 + 92) = 84$

hence $84 = 65p + 92q$

157

$65p = (157 * 84) - 92q$

i am unable to find exact ratio of p/q in this case, please help. Is there something wrong with the logic?
this question is repeated too...

I have my GRE on 30th so any forthcoming help will be thoroughly appreciated!!

Regards,
ak

READ

hence $84 = 65p + 92q$

157

As hence $84 = (65p + 92q) / 157$.

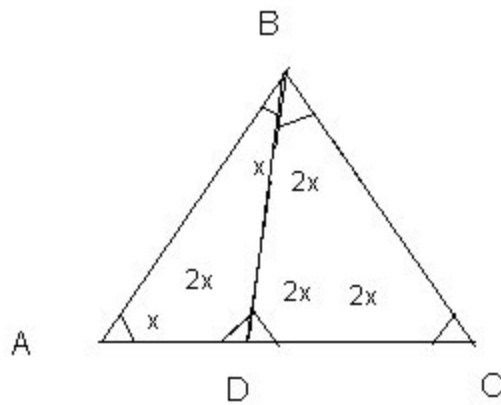


Quant:

1. If $a_1 = 2$ and $a_{n+1} = (a_n - 1)^2$ where n, n+1, n-1 are suffixes. Find a_{17} ?

- A. 1
- B. -2
- C. 4
- D. 0
- E. -1

2.



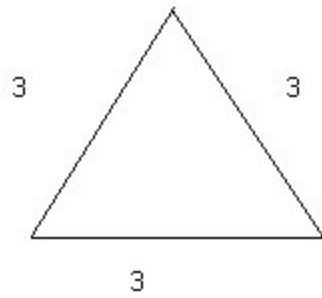
Note: Here x , $2x$ are angles of the triangle

Col A: Area of triangle ADB

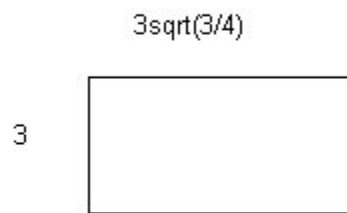
Col B: Area of triangle BDC

3. Given that there are six teams in music Quiz and their respective scores are 31, 24, 14, 10, 43 & 47 and there are 5 judges for this quiz. What is the minimum number of teams which must get 7 or more than 7 score from any one of the judge?

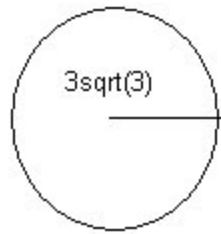
4. Given a triangle



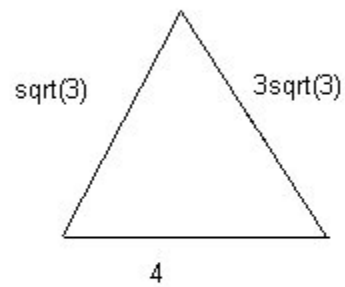
Which of the following diagrams will have the same area?
A.



B.



C.

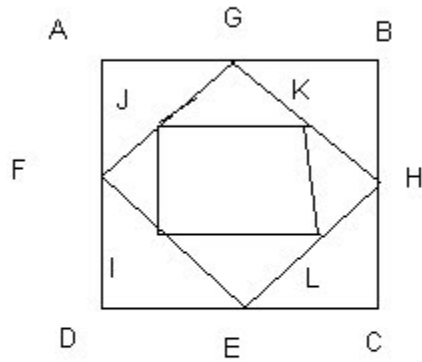


And so on.....

5. If $4^K > 9$, then

Col A: K
Col B: 3

6.



If the side of the square ABCD is 8 then what is the side length of the inner square IJKL?

7. Given N is a positive odd integer between 22 and 99. If the number in the tens digit is double the digit at the units place then the value of N ?

- A. $70 < N < 90$
- B. $90 < N < 99$
- C. $50 < N < 70$
- D. $30 < N < 50$

8. Given $8 < 2x < 14$ and $9 < x+4 < 16$

Col A: x
Col B: 6

9. Col A: $2^{-1} + 1/(2)^{-1}$

Col B: $(3)^{-1} + 1/(3)^{-1}$

10. Given $a_n = a_{(n-1)} - a_{(n-2)}$, $a_1 = -5$ & $a_2 = 4$. For $n > 2$, what is the sum of first 100 terms of n . { i.e. $(\sum a_n)$ from $n = 3$ to 103}. (Here n , $n-1$, $n-2$, 1, 2, 100 are suffixes).

- A. -5
- B. 4
- C. 1
- D. 9
- E. 13

11. In the sequence 3,33,333,3333..... What is the sum of hundred place digits?

12. Given length and area of arc of the circle and asked to find radius of the circle?

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1)D

2)D

3) ?

4)area of triangle $\frac{\sqrt{3}}{4} \cdot 9$ and check for the options

5)A

6)2

7)C

😊D

9)B

10) ?

11) ?

12)length of arc= $\frac{\text{teta}}{360} \cdot \text{pie} \cdot r^2$

please tell me if any mistakes 😊

1. D

2. D

3. ?

4. ?

5. D

6. 4

7. C

8. D

9. B

10. C

11. ?

12. ?

please explain the first question

how do you get 0

GRE is not everything in your life

but

It is something in your life

give $a_1=2$ and $a_{n+1}=(a_n-1)^2$

$a_2=a_1+1=(2-1)^2=1$

$$a_3 = a_2 + 1 = (1-1)^2 = 0$$

$$a_4 = a_3 + 1 = (0-1)^2 = 1$$

$$\text{so } a_{17} = 0$$

but it's given that

$n, n+1, n-1$ are suffixes ..

how could you subtract 1 from a_n ???

GRE is not everything in your life

but

It is something in your life

please explain the first question

how do you get 0

GRE is not everything in your life

but

It is something in your life

Quant:

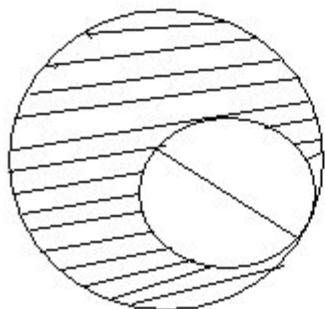
1. To satisfy the condition $x*y*z > 0$ which of the following conditions should be true?

A. $x > 0$ & $y > 0$ & $z > 0$

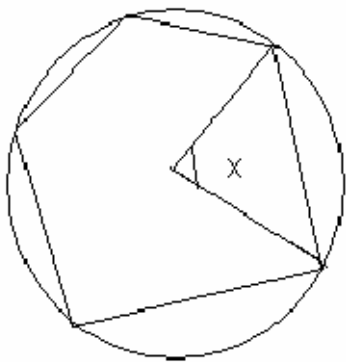
B. $x > 0$ & $y > 0$ & $z < 0$

and so on.....

2. Given a cube with one of its side given... and asked to find surface area?



3.
Given the diameter of bigger circle as some 'x'. Find area of shaded region, if smaller circle radius is half the radius of bigger circle.



4.
Given a pentagon of equal sides inserted in a circle and asked to find 'x'?

5. Given four points between positive x-coordinate and positive y-coordinate and asked to [find the distance](#) between two points?

1. to have $x*y*z$ positive , u should have
 $x>0,y>0,z>0$ (or) $x>0,y>0,z<0$ (or) $x>0,y<0,z>0$ (or) $x<0,y>0,z>0$
2. surface area of cube = $6 * \text{length}^2$
3. area of shaded region = $\pi * x^2 - \pi * (x/2)^2$
 $= (3/4)*\pi*(x^2)$

4. each angle in pentagon = 108 deg ..
 $x = 180 - (54 + 54) = 72 \text{ deg}$

5. distance between points = $\sqrt{(x_1-x_2)^2 + (y_1-y_2)^2}$

1. Two concentric circles were given one inserted in the other, the part between the circles was shaded.
Col A: The probability of finding a point in the shaded part is
Col B: $\frac{3}{4}$.

2. Around 6 right angled triangles were given in a semicircular shape for the first triangle they mentioned base and height as 1,1 and we must find the hypotenuse and go on like that.. by finding the hypotenuse of all the triangles and was asked to find the hypotenuse of the last triangle?

3. Given $10 \leq x \leq 25$ and the units digits of x^2 and $(x+2)^2$ is 1
col A: the value of x
col B: 15

4. At 8:00 total tips recieved by A & B were \$57. A gave off \$4 to the kithen staff and B received an additional \$3. If A's total collection was 12 more than B then what was B's final collection?

5. If a line with a slope of $-\frac{5}{8}$ passses through (2,k) and (4,3) then find k ?

6. Given a rhombus and a square with sides 5 each and angles of the rhombus were 120 and 60.
col A: area of the rhombus
col B: 25

1. There are 25 positive integers and each integer is a multiple of m. If the highest value of these integers is 250 then
Col A: m
Col B: 5

2. The nearest value of $\sqrt{171}$ is?

3. Col A: $|Z^2 + 1|$
Col B: $|Z^2| + 1$

4. If a line passes through (w,q) and (e,w) (these two points were given with some numerical value) then find the X-Intercept of the line?

5. A circle is inscribed in a Square, If the length of the diagonal of the square is $2\sqrt{2}$ then find the radius of the circle?

6. Approximate value of $\sqrt[5]{(2463.32)(234.3)/(2765.32)}$ will be
A. 5
B. 15
C. 25
D. 30
E. 50

7. In how many ways 3 couple can be seated on 6 seats, so that husband & wife sit adjacent?
8. In 1992, salary of 10 managers of a company was such that the median and mean of their salaries was equal. In 1993, the salary of highest managers increased by 10000\$ keeping all other managers salary same as in 1992.
Col A : Mean of the salaries in 1993
Col B : Median of the salaries in 1993
9. Given a equilateral triangle with side 5. In diagram it was shown as ABC where A was on origin, B was on positive Y Axis and C was in I quadrant. Find the slope of BC.
10. Given a big triangle (in diagram), suppose ABC... then it was divided into two triangles by joining point A from some point between BC (Say on point D). All angles were given
Angle(DAC) = $2x$, Angle(ACD) = $2x$, Angle(CDA) = $2x$, Angle(BAD) = x , Angle(ABD) = $3x$, Angle(BDA) = $2x$
Col A : Area of triangle ABD
Col B : Area of triangle ADC
11. Col A : Largest prime factor of (factorial(7) + 7)
Col B : Least prime factor of factorial(7)
12. Given an equation... of a line and was asked to find the parallel line among the choices (Question is similar to this with some equations given).
13. Given... surface area of a cube as somevalue(XXX) and was asked to find the volume of that cube?
1. There are 25 positive integers and each integer is a multiple of m . If the highest value of these integers is 250 then
Col A: m
Col B: 5
2. The nearest value of $\sqrt{171}$ is?
3. Col A: $|Z^2 + 1|$
Col B: $|Z^2| + 1$
4. If a line passes through (w, q) and (e, w) (these two points were given with some numerical value) then find the X-Intercept of the line?
5. A circle is inscribed in a Square, If the length of the diagonal of the square is $2\sqrt{2}$ then find the radius of the circle?
6. Approximate value of $\sqrt[3]{(2463.32)(234.3)/(2765.32)}$ will be
A. 5
B. 15
C. 25
D. 30
E. 50

7. In how many ways 3 couple can be seated on 6 seats, so that husband & wife sit adjacent?

8. In 1992, salary of 10 managers of a company was such that the median and mean of their salaries was equal. In 1993, the salary of highest managers increased by 10000\$ keeping all other managers salary same as in 1992.

Col A : Mean of the salaries in 1993

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9. Given a equilateral triangle with side 5. In diagram it was shown as ABC where A was on origin, B was on positive Y Axis and C was in I quadrant. Find the slope of BC.

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Angle(DAC) = $2x$, Angle(ACD) = $2x$, Angle(CDA) = $2x$, Angle(BAD) = x , Angle(ABD) = $3x$, Angle(BDA) = $2x$

Col A : Area of triangle ABD

Col B : Area of triangle ADC

11. Col A : Largest prime factor of (factorial(7) + 7)

Col B : Least prime factor of factorial(7)

12. Given an equation... of a line and was asked to find the parallel line among the choices (Question is similar to this with some equations given).

13. Given... surface area of a cube as somevalue(XXX) and was asked to find the volume of that cube?

1. If surface area of a cube is 36. Then Volume of the cube is?

Col a: volume of cube

Col b.15

2. If a person draw has 12 blue socks and 12 black socks. How many socks must be taken to get a pair of socks of the same color?

a. 14

b. 15

c. 13

d. 16

3. In how many ways can 1 professor and 5 students can be taken from 3 professors and 8 students.

4. If the area of a square is 16 and that of a rectangle is 14 then

Col A: perimeter of square

Col B: perimeter of rectangle

5. $2 < x < 6$; $3 < y < 8$

col A : x/y

col B : $3/4$

6. Given ABCD is a rectangle with AC and BD being its diagonals. Point D lies on the circumference of a circle having radius 7 and centre at B.

Col A: Length of diagonal AC
Col B: Radius of circle

My replies follow:

1. B) $6a^2 = 36 \Rightarrow a = \sqrt{6}$
 $a^3 = 6\sqrt{6} < 15$

2.C)

1- Let us start picking a blue socks.

2- Next could be a blue socks or a black socks. Worst case: consider it to be black!

3- It could be a blue socks or a black socks. Anyhow we have a pair. So any answer above 3 is valid. Least is 13.

3. $3C1 \times 8C5 = ..$

4. D) Can not be determined. Rectangle can come in a wide variety of shapes and sizes! 😊

perimeter of square = 16

rect: (1,14) \Rightarrow 30

(4, 3.5) \Rightarrow 15

5. D) Obvious

6. A) AC is the diameter > Radius

E&OE. Do correct me if I am wrong!

Thanks!!

1. Given five numbers... all are positive integers... in that highest number is 9 and lowest number is 2. If 5 is the median of the numbers and arithmetic mean of that series is also 5 then what is greatest possible value of the other two numbers?

2. A line was given and it makes an angle of 44 degree with negative y-axis in the 3rd quadrant. If a point on the line was given as $p(x,y)$.

Col A : x

Col B : y

3. Col A : $9!10!$

Col B : $10!+9!$

4. If $\frac{1}{6} + \frac{1}{3} + \frac{1}{9} = \frac{X}{Y}$ then what is the least possible value of y?

5. In how many ways 3 couple can be seated on 6 seats, so that husband & wife sit adjacent?

6. Given a parabola whose equation is given as $y = x^2 + 4$. If a point (1, p) lies on the parabola then what is the value of 'p'?

7. Given that a circle C passes through points (8,0) and (0,6) then

Col.a: The diameter of the circle is

Col.b: 10

8. A man when working with his wife takes 2 hours to complete a housework and takes 3 hours when working alone, so how long would it take for his wife to complete the housework working alone?

Quants:

1. Given a set of numbers x , x^2 , x^3 , $1/x$, x^{-2} and $x=1/2$. Find the median?
2. Area of a circle was given & a sector was shaded and the angle of that sector is given as 135. Then asked to find the area of the shaded region?
3. Given $3x+2y=8$ and $x>y$
Col A: $3x+4y$
Col B: 8
4. A survey was conducted for 248 companies. In that 120 companies receive calls using a switch and 90 companies among those have voice calls facility.
Col A: The number of companies that doesn't have voice calls facility but have switch facility.
Col B: 62.
5. Given two sides of a triangle as 12 and 5 which are opposite to x and y angles and the length of the third side is given as 11. Then
Col a: $x+y$
Col b: 90

Posting answers I got. Do correct me if someone finds me wrong

1. 28.375
2. $(3/8) \times \pi \times r^2$
3. D (answer varies depending on y is +ve or -ve).
4. B. 120 companies have switch. Out of that 90 have voice facility. So companies having switch and not voice = $120 - 90 = 30 \Rightarrow 30 < 62$
5. A. $\sqrt{25 + 121} = \sqrt{146} > \sqrt{144} \Rightarrow$ the angle opposite to longest side > 90 . Hence $x > 90 \Rightarrow x+y > 90$.

Quants:

1. One square is given with side 5 and one rhombus is given with sides 5. It is also given that angles at the base is 60 and at the side it is 120.
Col A: area of square
Col B: area of rhombus
2. Given $4x + 6y = -8$
 $-2x - 3y = 4$
Col A : x
Col B: y
3. Given $0 < y < 1$
Col A: $xy + y$
Col B: $yz + z$

4. The integer $(x - 1)$ is a prime number between 40 and 50.

Col A: The sum of all different prime factors of x

Col B: 14

5. Two distinct numbers are taken from 1,2,3,4.....28. Find the probability that their sum is less than 13.

6. Given that, consider a square ABCD, if E and F are mid points of side CB and CD then what is the ratio of area of triangle AEF to area of square?

7. Given that if an average of first 5 numbers of a particular set of 12 numbers is 6 and average of all these 12 numbers is 7.5 then find the average of first 7 numbers is?

a) 8.4 b) 8.5 c) 8.6 d) 8.7 e) 8.8

i think in the last que it should be asked the sum of last 7 no's if not let me know how to do it
i'm getting aswer as 8.5

6. Given that, consider a square ABCD, if E and F are mid points of side CB and CD then what is the ratio of area of triangle AEF to area of square?

i want solution

QUANTS:

1. In a city of 'n' population, if 26% are registered voters, of these 24% are above 65years and rest are below 65years then how many non-registered people are aged above 65years?

2. A circle is given and there are 7 circles inscribed in that circle... such that along the diameter of the bigger circle there are 3 circles and 2 up, 2 down.. i.e total 7 circles are arranged like this.. in that big circle and all the 7 circles are shaded. If the radius of the bigger circle is 'r' then find the total area covered by all these smaller circles in terms of r?

3. Given $x = 5, 6, 7, 8, 9$ and $y = 11, 12, 13, 14$. By selecting one from x and one from y, how many sets of distinct values we get for $x+y$?

4. At 8:00 total tips recieved by A & B were \$57. A gave off \$4 to the kithen staff and B received an additional \$3. If A's total collection was 12 more than B then what was B's final collection?

5. If a line with a slope of $-5/8$ passses through $(2, k)$ and $(4, 3)$ then find k ?

6. Given a parabola whose equation is given as $y = x^2 + 4$. If a point $(1, p)$ lies on the parabola then what is the value of 'p'?

Quants:

1. Given a triangle with one angle 60degree and with a semicircle on the side opposite to the angle mentioned in the corner. If the two sides of the triangle adjacent to angle mentioned in the corner were 'x' units each then find the area of the traingle? Given the Circumference of the semicircle as 15pie?

2. A company manufactures 10000 bulbs at a cost of 0.60\$. Of these 0.1% were discarded and it sold the remaining for 1.1\$ each. What is the difference between its revenue and manufacturing cost?

3. Given a two figures, first figure contains a square with a circle of radius 'r' inscribed in it and the area outside the circle (within the square) is shaded. Second figure contains a circle radius of 'r' with a square inscribed in it and the area outside the square (within the circle) is shaded.

Col A: Area of Shaded region in the first figure

Col B: Area of Shaded region in the Second figure

4. Given two rectangular solids. If smaller one has edges of 80% of the larger ones then

Col A: The ratio of smaller solid to the bigger is

Col B: 66/200

5. $[2^{17} * 3^{18} - 2^{16} * 3^{17}] =$

6. Given that area of circle is 72 and angle of sector in it is 135 degree. What percentage of area of circle is covered by sector area?

7. If $M = (2^8)(3^4)(5^2)$ then $(2^{16})(3^8)(5^4)$ is?

A. m

B. m^2

C. 2m

D. $m/2$

E. \sqrt{m}

8. There are 28 men in a room in that 14 men are selected out of which 7 are under 50 years

Col A: Percentage of men under 50

Col B: 40%

9. Given two circles "p" and "q" which touch each other and a line AB is drawn from center of one circle to other. Given that the area enclosed by A to the other center area enclosed by B are in the ratio 2:1. If the area enclosed by A is 'pie' then the area enclosed by B is?

10. Ann gets salary 'X'. She spends for food and rent, so that the remaining salary left is 'Y'.

ColA: X

ColB: X-Y

Quants:

1. Given that n is a positive integer

Col A: $(-3)^n$

Col B: $(-3)^{n+1}$

2. If $(u * v * w) = 595$ then $u + v + w = ?$

3. Given that 'x' is a positive integer and some options were given in that.... we need to find the correct expression which yields positive even integer ?

Ans: $x^3 + 3x + 4$

4. Find the area of the quadrilateral whose coordinates are (0,0), (3,0), (0,3), (7,5) ?

5. Col A: $1 - (1/2)^2 + (1/2)^4 - (1/2)^8$
Col B: 0.75

6. If $0 < x < 1$ then
Col A: $x + (2x/3) + x/6$
Col B: $5x/4$

7. If $\text{mod}(3x+2) = 8$ then
Col A: $\text{mod}(x)$
Col B: 0

8. In an country due to acid rain fall of 1 inch the cars in that city appears 70 years old, if rain fall in that year is 0.6 inches then how many years does the car look old?

9. Comparison of Standard deviation of the following numbers.
Col a: 56, 76, 98, 86
Col b: 88, 72, 53, 88

10. A circle is inscribed in a Square, If the length of the diagonal of the square is $2\sqrt{2}$ then find the radius of the circle?

Quants:

1. What is the remainder of $(7^0 + 7^1 + 7^2 + \dots + 7^{19})/14$?

2. Out of 10 [machine tools](#), 2 are defective and 3 are to be selected. What is the probability that 3 chosen out of 10 are not defective?

3. Two flasks are of cylindrical shape. One flask has base area 8π and other has base area 4π . The 1st flask is filled with water upto 3 inches and 2nd flask is filled with water upto 1 inch. Find the final height of water in second flask if some of the water from flask 1 is to be poured into flask2 to make both the heights equal ?

4. Col A: $10^{100} + 2^{100}$
Col B: $(10+2)^{100}$

5. If $(1/7) + (2/3) + (4/6) = x/y$.
What is the least possible value of x?

6. Col A : $149! / 148!$
Col B: $149! - 148! / 147!$

7. Given $0 < x < 1$
Col A : $x^2 - 1/x$
Col B: $x - x^2 - 2$

8. If 'x' is $33\frac{1}{3}\%$ greater than 'y' and 'y' is 25% of 'z' then express 'x' in terms of 'Z'

9. What percentage do integers from 100 to 299 inclusive of having 2, 4, 5, 6, 7, 8 and 9 digits in units place comprise of integers upto 350?

10. Given a rectangular solid with length 4, height 3 and breadth 3. If it is cut vertically along its diagonal, how much is the surface area of one of the halves to the total?

11. If $x > 0$

Col A: 2^x

Col B: $2^{(x)^2}$

12. Given a right angle triangle with base length 10m. If the angle opposite to base is given as 20degrees. Find the hypotenuse length?

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Quants:

1. If the perimeter and area of a rectangle are given as 100m and 60sq.m then find the length of the rectangle?

2. Col A : Area of a square of side 5m

Col B : Area of a parallelogram of side 5m

3. Given that $u \cdot v \cdot w = 5995$. If u, v & w are integers greater than one then find the value of $u+v+w$?

4. Of all the chords passing through a given point in a circle, the least length would be of ...

A. The one which is bisected at the point

B. The one which is trisected at the point

C. The one which is a third in length of the diameter

D. The one which is half in length of the diameter

5. A tank was 80% filled with water and the dimensions of it were given. Find the number of lead balls of radius 1 that need to be put so that the volume is atleast 90 % but less than 95% .

6. Given that area of circle is 72 and angle of sector in it is 135degree. What percentage of area of circle is covered by sector area?

Quants:

1. Col A: Area of rectangle has length x and breadth y

Col B: Area of triangle has base x and height y

2. Col A: $(\sqrt{48} + \sqrt{27})^2$

Col B: 3

3. In a party of 66 members in a hotel, 40 members like dancing, 23 members like swimming and 6 members like either dancing or swimming or both. Find the number of people who likes only dancing?

4. If $\frac{1}{6} + \frac{1}{3} + \frac{1}{9} = \frac{X}{Y}$ then what is the least possible value of x ?

5. Given that 'X' is 3 years younger than 'Y' and 'Y' is 20 years older than 'Z'.

Col A: X's present age

Col B: Twice the present age of Z

6. Given a series of five numbers $x, x^2, 2x, x^{-2}, 3$. If $x = 0.2$ then what is the mean of above scale?

7. $(5\sqrt{2} - \sqrt{3}) * (\sqrt{2} - \sqrt{3}) = ?$

A. $8 + 3\sqrt{3}$

B. $4 + 2\sqrt{2}$

C. $5 + 4\sqrt{3}$

& so on....

8. If the area of circle is 72 and angle of sector in it is 135degree then what is the sector area?

(The question appeared in exam is similar to this with some numerical changes)

9. A : 3, 3, 5, 9, 11, 11

B : 7, 7, 9, 11, 13, 13

Col A: Standard deviation of A

Col B: Standard deviation of B

10. Given area of a Rectangle as 20sq.m

Col A: Perimeter of Rectangle is

Col B: 30

11. Given an Isosceles triangle with base length 'y' and other two sides length as 'x' each. If $x = 30$ then range of 'y' is ?

- A. y greater than or equal to zero
- B. y greater than or equal to 30 but less than or equal to 45
- C. y greater than or equal to 30 but less than or equal to 60
- & so on....

12. In 1994, a company X profits increased by 40% and company Y profits decreased by 20%. But by the end of 1994, company X profits decreased by 20% and company Y profits increased by 40%.

Col A: Earnings of Company X

Col B: Earnings of Company Y

13. If $0 < t < u < v$, then

Col A: Mean of t, u, v

Col B: Median of t, u, v

14. Given a cube which is cut vertically along its diagonal, and was asked to find the surface area of one of the halves?

15. Given.. if $1 < xy < 4$ and $1 < y < 2$ then

Col A: x

Col B: 2

16. Given a cuboid of dimensions 20m, 17m and 12m. If the mass of that box is 17kg, then what is the density of the box in cubic feet.

17. Given that, 26% of a community members are under 65years and 17% of that community members are above 65years. If 24% of the community members are registered voters then how many members above 65years contributed in registration?

A. $\frac{2}{5}$

B. $\frac{2}{9}$

C. $\frac{7}{11}$

& so on....

18. $5^9 + 7^{10} =$

Col A: The least factor of above is

Col B: 13

19. Given that, mean of 4 numbers is 'M' and mean of 5 numbers is 'N'. What is the mean of

all the 9 numbers?

20. Given a circle with 7 circles inscribed in it. such that along the diameter of the bigger circle there are 3 circles and 2 up, 2 down.. i.e total 7 circles are arranged like this in that bigger circle and all the 7 circles are shaded. If the radius of the bigger circle is 'r' then find the total area of unshaded part?

21. If 'S' is the set of values of K where $(7/3) < K^2 < (37.6)$ then

Col A: Number of Even numbers in the set S

Col B: Number of Odd Numbers in the set S

Quants:

1. Given that $p + t = 5h$, then what is the Arithmetic mean of p, t, h ?

2. Col A: $2^{(-54)}$

Col B: $2^{26} - (2^{24}) / (8^{27}) - 8^{26}$

3. Given a right angled triangle ABC (C takes the right angle i.e CB is the base, AC is the Opposite side & AB is hypotenuse) a perpendicular bi-sector is drawn from mid point D of vertical side AC to the midpoint 'P' on slanting side AB . So that a triangle APC and trapezoid PDCB are formed.

Col A: Area of triangle APC

Col B: Area of quadrilateral PDCB

4. If $3x + 2y = 8$ then

Col A: $3x+4y$

Col B: 8

5. If $u * v * w = 595$ then $u + v + w =$

6. If $\text{mod}(3x + 2) = 8$ then

Col A: mod X

Col B: 0

7. ColA: 50% of 14% of X

Col B: 14% of 50% of X

(some other number is given in place of x)

8. There are 28 men in a room in that 14 men are selected out of which 7 are under 50 years.

Col A: Percentage of men under 50

Col B: 40%

9. Col A: Least prime factor of $(\text{factorial}(7) + 7)$

Col B: Largest prime factor of $\text{factorial}(7)$

Quants:

1. Given that a triangle is inscribed in a circle and diameter of the circle is one of the side of triangle. If the side other then the diameter side is given as 5 and area of triangle is also given as 5 then find the area of circle ?
2. What percentage do integers from 100 to 299 inclusive of having 2, 4, 5, 6, 7, 8 and 9 digits in units place comprise of integers upto 350?
3. Given a series of five numbers x , x^2 , x^3 , $1/x$, x^{-2} and $x=0.5$. Find the median?
4. Two concentric circles were given one inserted in the other, the part between the circles was shaded.
Col A: The probability of finding a point in the shaded part is
Col B: $3/4$.
5. When a number 's' is divided by 9, the remainder is 1 and when it is divided by 11 remainder is 8. Find 's'?
6. A semicircle was given. If the end the angles formed by lines from end points of diameter to the circumference was given 90 and the angle between one of the chords and diameter was 'x'.
Col A: x
Col B: 45
7. If $x > 0$ and $y > 0$
Col a: $x^4 + y^3$
Col b: $x^2 + y$
8. Given a cuboid of dimensions 20inches, 17inches and 12inches. If the mass of that box is 17kg, then what is the density of the box in kg/cubic.feets.

Quants:

1. Col A: The remainder when $5(10^n)+1$ divided by 3
Col B: The remainder when $5(10^{(n+1)})+1$ divided by 3
2. If $y = -3$ then which of these is true
A. $y < y^3 < y^4 < y^2$
B. $y^4 < y^2 < y^3 < y$
C. $y^3 < y < y^2 < y^4$
D. $y^2 < y^3 < y^4 < y$
3. If 7, 4, 5, 1, 2, 7, 4, 5, 1, 2..... is the series then what is the 64th term?
4. Col A: $2/(1/3(1/3))$
Col B: $2/(1/3/(1/3))$

5. Col A: 300^{900}

Col B: 900^{300}

6. If the area of the circle is given as 9π . Find out the perimeter of the circle?

7. If $\frac{1}{3} + \frac{2}{6} + \frac{3}{7} = \frac{x}{y}$. What is the least value of 'x'?

8. Given a series $S_1, S_2, S_3, \dots, S_n$. If $S_1 = 5, S_2 = 7$ then find $S_6 \dots$ such that

$S_n = 10[S(n-1)]$ for 'n' divisible by 3

$S_n = S(n-3)$ for 'n' not divisible by 3.

9. If $X > 1$

Col A: Circumference of a circle with diameter X

Col B: Area of a circle with diameter X

10. Given... that the area of a circle as 72 and angle of sector as 130 degree (this part is shaded in the figure). Find the area of the sector (shaded part)?

11. 'S' is the set of positive integers which lies between $\frac{7}{3} < k^2 < \frac{150}{4}$

Col A: Number of even numbers in 'S'

Col B: Number of odd numbers in 'S'

12. $N = 5^9 + 7^{10}$

Col A: What is the least factor of 'N' greater than 1

Col B: 3

13. A survey was conducted for 248 companies. In that 120 companies receive calls using a switch and 90 companies among those have voice calls facility.

Col A: The number of companies that doesn't have voice calls facility but have switch facility.

Col B: 62

14. If $u \cdot v \cdot w = 595$ and if $u > 1, v > 1, w > 1$. Find $u + v + w$?

Sol: 29

15. Col A: $(\sqrt{48}) - \sqrt{27}$

Col B: $\sqrt{3}$

Sol: C

16. Given that a triangle is inscribed in a circle and diameter of the circle is one of the side of triangle. If the side other than the diameter side is given as 5 and area of triangle is also given as 5 then find the area of circle?

Sol: $29\pi/4$

17. If $(\frac{1}{16}) + (\frac{1}{(x)^2}) = (\frac{1}{9})$, then find $1/x$?

[b]Quants:

1. If $10^x - 550 < 9772$. What is the least possible value of x ?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 6

2. Given a 5 number series. If 6 is the median, least number is 2 and greatest number is 9.

Col A: The greatest possible value of sum of the remaining two numbers

Col B: 22

3. Col A: $10! + 9!$

Col B: $10(9!)$

4. What percentage do integers from 100 to 299 inclusive of having 2, 4, 5, 6, 7, 8 and 9 digits in units place comprise of integers upto 350?

5. If $a_i < a_{i+1}$ and $i \neq 0$ then

Col A: a_5

Col B: a_7

6. Given a cuboid of dimensions 20inches, 17inches and 12inches. If the mass of that box is 17kg, then what is the density of the box in kg/cubic.feets.

7. In a country, the tax paid by a person is 1500 and 6% of the taxable income above 3000. If the total tax paid by a person was 4% of his taxable income, what was that person's taxable income?

8. There was a semicircle drawn over one of the side of a square, the side of square was 1 unit each. Find the perimeter of that figure?[b]

Quants:

1. If $0 < t < u < v$, then

Col A: Mean of t, u, v

Col B: Median of t, u, v

2. Given that ' x ' lies between $\sqrt{7}$ and $150/4$.

Col A: Number of even integers which satisfies the value of ' x '

Col B: Number of odd integers which satisfies the value of ' x '

3. A: 10, 30, 50, 70, 90

B: 10, 45, 50, 55, 90

Col A: Standard Deviation of A

Col B: Standard Deviation of B

4. Given $x < 0$

Col A: x

Col B: y^2

5. In a Election if 'X' gets $33\frac{1}{3}\%$ more votes than 'Y' gets and 'Y' gets 25% fewer votes than 'Z'.

Col A: Number of votes received by 'X'

Col B: 8% of votes received by 'Z'

6. Col A: $(25^b) / 5^a$

Col B: 5^b

7. Given an series a_1, a_2, a_3, \dots and it also mentioned that $a_1 = 25$, a_2 is decreased by 2 and the series goes on.. in the same manner.

Col A: a_{100} term

Col B: 10000

8. There are total 90 students, average passing students is 84 and average fail students is 60, What percentage of arithmetic mean of passing students?

A) 12%

B) 15%

C) 40%

D) 70%

E) 75%

9. Two points $R(12, 8)$ and T are given on xy-plane and x-intercept of T is 5 less than x-intercept of R, slope of line connecting these two co-ordinate is 2, What is the T co-ordinate?

10. There are 70 students, 48 students get more than 5 marks and 25 students get less than 10 marks so find the students who got.. more than 5 and less than 10 marks?

11. Given $3x + 2y = 8$ and $x > y$

Col A: $3x + 4y$

Col B: 8

12. Find the area of the quadrilateral whose coordinates are $(0,0)$, $(3,0)$, $(0,3)$, $(7,5)$?

13. Col A: $1 - (1/2)^2 + (1/2)^4 - (1/2)^8$

Col B: 0.75

14. If $(3/7) + (2/3) + (1/6) = x/y$. What is the least possible value of x?

15. What percentage do integers from 100 to 299 inclusive of having 2, 4, 5, 6, 7, 8 and 9 digits in units place comprise of integers upto 350?

16. Given that, mean of 4 numbers is 'M' and mean of 5 numbers is 'N'. What is the mean of all the 9 numbers?

Quants:

1. Given $0 < x < 0.5$

Col A: $x + x^{-2}$

Col B: $x^2 + x^{-1}$

2. Col A: $1 - (1/2)^2 + (1/2)^4 - (1/2)^8$

Col B: 0.75

3. If $u \cdot v \cdot w = 595$. What is $u + v + w$?

4. Col A: 300^{900}

Col B: 900^{300}

5. There are 28 men in a room in that 14 men are selected out of which 7 are under 50 years.

Col A: Percentage of men under 50

Col B: 40%

6. Col A: $\text{Mod}(x+y)$

Col B: $\text{Mod}(x) + \text{Mod}(y)$

7. Col A: $2^x(x^2 - 5x + 1)$

Col B: 2

Quants:

1. When a square with a centre c is rotated through an angle 45 degrees, it has a new centre c'. If the length of the square side was given as 5, Find the distance between c and c'?

2. If x intercept of a line is 'a' and y intercept is 'b', Find the slope of that line?

3. If a triangle is given with two sides 20 each, Find the range of values of third side?

4. If $1/x + 1/x^2 = -1/4$ then the value of x is?

5. Given a square of area 18sq.m

Col A: Length of the side of the square

Col B: Length of the diagonal of the square

6. If $u \cdot v \cdot w = 595$, then $u + v + w$?

7. Find the percentage of numbers between 100 & 299 inclusive which end with 3,4,5,6,7,8,9, $(2+3^{1/2})(2-3^{1/2})$.

8. Col A: $10!+9!$

Col B: $10!9!$

Quants:

1. A survey was conducted for 248 companies. In that 120 companies receive calls using a switch and 90 companies among those have voice calls facility.

Col A: The number of companies that doesn't have voice calls facility but have switch facility.

Col B: 62.

2. Given that 'P' is a prime number greater than 2

Col A: number of factors of $2P$

Col B: number of factors of P^2

3. Col A: $3^{(4n+2)}+5$ when divided by 10 leaves remainder

Col B: 4

4. Given that x & y are positive integers and $x^n = y^m$

Col A: n

Col B: m

5. A triangle ABC is given. A point D divides the side AB such that a triangle ADC is formed and $AD/DB=1/3$. If the area of the triangle ABC is r. Find the area of the triangle ADC in terms of r?

6. Given an series $s_1, s_2, s_3, \dots, s_n$ and $s_{n+1}=(1/2)s_n$ and $s_1=1/2$.

Col A: s_6

Col B: $2^{15}(s_{21})$

Quants:

1. If the sum of the first 100 positive integers is 5050 then what is the sum of the first 200 positive integers?

A. 10,100

B. 10,200

C. 15,050

D. 20,050

E. 20,100

2. Col A: $\sqrt{11}$

Col B: 3.5

3. If the product of 6 integers is negative, at most how many of the integers can be negative?

4. If the slope of the line passing through the point (5,5) is $\frac{5}{6}$. All of the following points could be on the line except.....

(some points were given in the options).

Question is similar to this.....

5. If $3x + y = 19$ and $x + 3y = 1$ are the equation given. Find the value of $2x + 2y$?

6. John wrote a phone number on a note that was later lost. John can remember that the number had 7 digits, the digit "1" appeared in the last three places and "0" did not appear at all. What is the probability that the phone number contains at least two prime digits?

a) $\frac{15}{16}$

b) $\frac{11}{16}$

c) $\frac{11}{12}$

d) $\frac{1}{2}$

e) $\frac{5}{8}$

7. A group of 4 pumps are filling a tank. Each of the 3 smaller pumps works at $\frac{2}{3}$ rd the rate of the largest pump. If all 4 pumps work at the same time, they should fill the tank in what fraction of the time.... that it would have taken the largest pump if it operated alone?

8. If $p+6$, $q+6$, $r+6$ has a standard Deviation 'S' then what will be the Standard Deviation for p , q , r ?

a. $6S+6$

b. $8S+18$

c. $6S$

d. none

9. If the profit made by a company is given by P and the tax the company has to pay to the government is $\$6000 + r\%$ of the profit over $\$250000$. If a company has to pay 3% of its profit as tax, what is the profit made by the company?

10. Given $a_1, a_2, a_3, \dots, a_n$, is a series such that $a_n = a_n - a_{(n-1)}$, for $2 > n$. If $a_1 = -5$, $a_2 = 4$, find the sum of first 50 numbers of the series?

11. Given two circles of radius 3 and 5, if a line tangent to the smaller circle passes through the bigger circle at points Q and P. What is the length of PQ?

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Quants:

1. If $a_2 = a_1 + 4 \cdot a_1$ and $a_1 = 3$ then find the 19th term of series?

2. If $x = (1000)^{10}$

Col A: number of zeroes in 'x'

Col B: 30

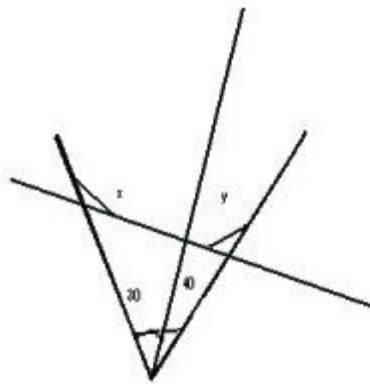
3. If $621 < x < 675$ and "x" is a multiple of 3, and if "u" is unit digit of "x" and "t" is tens digit of "x" then which of the following should be a multiple of "x".

A. $t+u$

B. $u-t$

C. t^u

D. u^t



4.
please wait a minute for the above figure to download

Col A: X
Col B: Y

5. There are 26 women in a room in that 13 women are selected out of which 7 are under 40 years.

Col A: Percentage of women under 40

Col B: 40%

Quants:

1. For 'n' any positive integer, if $A_n = n^2$

Col A: $A_1 + A_2 + A_3 + A_4 + A_5$

Col B: 30

2. If a principle amount of Rs.10,000/- were given at the rate of interest x% and Rs.8000/- were given at the rate of y% and if $x = 3y/4$ then

Col A: interest on money given at the rate x percent

Col B: interest on money given at the rate y percent

3. How many maximum non-overlapping divisions can be made in a rectangular by drawing 3 straight line.

4. Given a right angle triangle ABC, the length of hypotenuse AB is 15 and a point D was given on AB and DB is 5 and other point E was given on AC. Angle c and e are both 90 degree. Find the length of AE?

5. A company charges 4\$ per order as transportation fees and 0.5\$ per book. If an order costs x\$ and it is equal to m times the transportation fees. What is the charge per book in terms of x and m?

1. A
2. B
3. 6
4. no idea
5. no idea

hi officerwrangler, for 1 and 2 my ans are same as u.

for 4 ans should be 8 or 6

for 5 if we want to express in terms of m then ans should be $8(m-1)$. but how can it be expressed in terms of both x and m?

and about 3, please explain me how u got the result?

[quote="drarajus faculty"][b]Quants:

1. For 'n' any positive integer, if $A_n = n^2$

Col A: $A_1 + A_2 + A_3 + A_4 + A_5$

Col B: 30

2. If a principle amount of Rs.10,000/- were given at the rate of interest x% and Rs.8000/- were given at the rate of y% and if $x = 3y/4$ then

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5. A company charges 4\$ per order as transportation fees and 0.5\$ per book. If an order costs x\$ and it is equal to m times the transportation fees. What is the charge per book in terms of x and m?

1. If $0 > x > -1$ then which of the following must be the greatest among all the given options
- A. x
 - B. $2x$
 - C. x^3
 - D. $x-1$
 - E. x^3-1

2. If $x < y$ and $x^2 - xy = 0$
- Col a: x
- Col b: 0

3. Col A: $\frac{1}{97} + \frac{1}{98} + \frac{1}{99} + \frac{1}{100}$
- Col B: $\frac{1}{25}$

4. In one bag, half the balls are red, $\frac{1}{8}$ green, 24 are neither, so how many balls are there altogether?

5. Col a: $(4^{-3} + 4^9) / 32^{-2}$
- Col b: $16(1 + 2^{23})$

6. If a man walks at the rate of 3miles per hour then the distance he covered in 18 minutes is given by (1mile = 5208foot)
- A. 4000 feet
 - B. 4250 feet
 - C. 4500 feet
 - D. 4750 feet
 - E. 5000 feet

7. Given a smaller circle inscribed in the larger circle, if.... 'r' is a point on the smaller circle, 's' is a point on the larger circle, 'o' is the center of both the circles, or = x, rs = y, and if the area of the smaller circle is equal to the area of the big circle minus the area of the small circle, then what is value of y in terms of x?

8. $\frac{1}{500} - \frac{1}{1000} =$

9. If x is a positive number, then
Col A: x^2
Col B: $1/x^2$

10. $\text{mod}(2 - 1/2) + \text{mod}(2 - 7/2) = ?$

11. A man invested Rs.10,000 at the rate of interest $x\%$ and Rs.8000 at the rate of interest $y\%$. If $x = (3/4)y$ then
Col A: Interest for 1 year for 10000 at $x\%$
Col B: Interest for 1 year for 8000 at $y\%$

hey anybody can explain the problem no 1,6,7,10,11

i think answer for 3 is C!!!

plzz reply me as soon as possible?

I think the ans of 3 is A
since $1/97$, $1/98$, $1/99$ all are greater than $1/100$ and $1/25$ is equals to
 $1/100 + 1/100 + 1/100 + 1/100$

so, col A should be greater than col B.

I think the ans of 3 is A
since $1/97$, $1/98$, $1/99$ all are greater than $1/100$ and $1/25$ is equals to
 $1/100 + 1/100 + 1/100 + 1/100$

so, col A should be greater than col B.

here is my calculated answers for 1,6,7,11
1. E
6. D (most approximate)
7. $x(\sqrt{2}-1)$
11. B

For 10, is mod means the absolute value(modulus)?

let me know am I right or wrong?

ans for 1st is Cif $(X^3)-1$ is becomes small value

for example take $-0.3.....(-0.3^3)=-0.027$

$-0.027-1=-1.027.....(-1.027<-0.027)$

Answers for d 28th may quant thread according to me:

1. C
2. C
3. A
4. 64
5. A
6. D
7. $x(\sqrt{2}-1)$
8. $1/1000$
9. D
10. 3
11. B

Answers for d 28th may quant thread according to me:

1. C
2. C
3. A
4. 64
5. A
6. D
7. $x(\sqrt{2}-1)$
8. $1/1000$
9. D
10. 3
11. B

1. Given three coordinates (0, 0), (2, 4) and (4, 2) and asked to find the area?

2. Given numbers from 1 to 10. Two numbers are selected from these 10

numbers and they can be same also. What is the probability that at least one of them is even?

- A. $1/2$
- B. $3/4$
- C. $1/4$
- & so on....

3. If the numbers 1, 5, 6, 8 & 9 are used once and are used to form a three digit number 't' and a two digit number 'r', then what is the minimum value of $t - r$?

- A. 56
- B. 58
- C. 70
- D. 73
- & so on...

4. If 'k' is an integer, then

Col A: The remainder when $k^2 - k$ is divided by 2
Col B: 0

5. Given a series 1, -1, 2, -2.....

Col A: The sum of the first 67 terms
Col B: 34

- 1) 8 not sure
- 2) B
- 3) B
- 4) D
- 5) C

1. by dist formula ,
we get two sides distance as $2\sqrt{5}$ and another $2\sqrt{2}$.

=>  isosceles triangle

Hence Area = $\frac{b}{4} (\sqrt{4a^2 - b^2})$

here $a = 2\sqrt{5}$
 $b = 2\sqrt{2}$

by Sub.. we get $A = 6$

Area of an isosceles triangle = $\frac{b}{4} (\sqrt{4a^2 - b^2})$

- 1. 6
- 2. B
- 3. B
- 4. C
- 5. C

Is it C?

Can anyone tell any case where remainder is nonzero?

it is $\frac{(k^2-k)}{2}$...right

Regards,
Himanshu

Q4.

if k is an integer then $k^2 - k = k(k-1)$ is always divisible by 2 since either k or $k-1$ should be even or 0
so, ans should be C

- 1. What is the range of numbers between 400 and 700 that are divisible by 2 and 3?
- 2. Col A: $x^2 + y^2$
Col B: $(x + 1)^2 * (y + 1)^2$
- 3. Given a series $p_1, p_2, p_3, p_4, \dots$. If $p_1 = 1$ & $p_n = 24 * p_{n-1} + 8$, then
Col A: The remainder when p_{66} is divided by 6
Col B: 4
(Here 1, 2, 3, 4, 66, n & $n-1$ are suffixes)
- 4. If 1 pen & 1 stapler costs 12.50\$ and 3 pens & 2 staplers costs 25\$, then
Col A: Cost of 1 pen
Col B: 4.20\$

5. Given a circle in the coordinate system with centre at (3, 4), find the radius of the circle?

6. Given average of a & b as 10. When 'c' is added to a & b, then the average is 10(again).

Col A: Value of 'c'

Col B: 10

7. If $-1 < x < 0$, then which of the following will have greater value?

A. $0.8x$

B. $1/\sqrt{x}$

C. $(5x)/6$

D. \sqrt{x}

& so on.....

8.

Col A: $a^2 + b^2 + c^2$

Col B: f^2

Answers and Explanations

1. 51. Since the question asks for both divisible by 2 and 3. We need to find the numbers divisible by 6. Now 402 is the first number in the range that is divisible by 6. Starting from 402 there are 17 numbers in the range 400 to 500 divisible by 6. 17 again in 500 to 600 as well as 600 to 700. So the answer is $17*3 = 51$

2. Relationship cannot be determined. take x and y 0 and take x and y -1 and test.

3. Col B is greater. because the first term is P_n is multiplied by 24 so it will give remainder 0 when divided by 6 but the +8 in the end will give remainder 2.

However $P_{66} = 24^{66} + 8*24^{65} + 8*24^{64} + \dots + 8*24 + 8$

4. I think the answer is Col B is greater. its given that 1pen & 1stapler costs \$12.50 which means 2pen & 2stapler costs \$25. But its also given that 3pens & 2staplers costs \$25. his is only possible when pens are given for free i.e. zero cost.

5. Radius of the circle cannon be found just from the center

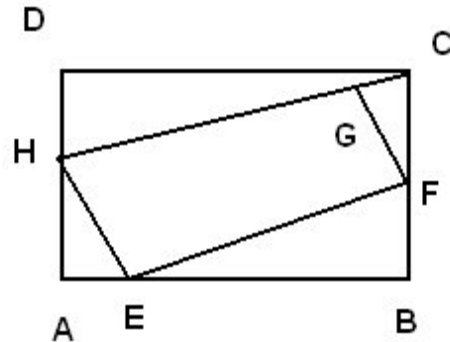
6. Col A and Col B are equal

7. based on the given options the answer is A. As $5/6$ is .83 and B and D are not feasible as complex number is not in GRE syllabus.

8. Both Cols are equal.

Quant:

1.



Given a figure similar to the above, as EFGH inscribed in ABCD, 'E' on AB, 'H' on AD; 'F' is on BC and is the midpoint of BC & a line segment connecting H and C. The point where 'F' intersects HC is G. Here E and H are not mid-pts of respective sides as "F". If angle DHC=45 and side AE=4, then find the area of rectangle EFGH?

2. Find the number of integers that are not divisible by 7 between 67 and 177?

3. If $x > 0$, then

Col A: $(2x)^0 + (2x)^1 + (2x)^2 + (2x)^3$

Col B: $1/x$

4. Which of the following is less than 30% of 1

A. $3/17$

B. $1/3$

C. $22/25$

D. 0.6

& so on....

5. The given question had a figure of equilateral triangle with a circle inscribed in it and the length of one side is given as '6'.

Col A: Area of circular region

Col B: 9π

6. Given numbers from 1 to 10. Two numbers are to be selected from these 10 numbers and they can be same also. What is the probability that at least one of them is even?

A. $1/2$

B. $3/4$

C. $1/4$

& so on....

7. If $-1 < x < 0$, then which of the following will have greater value?

- A. x
- B. x^3
- C. $x^3 - 1$
- D. $x - 1$

8. If a number is divisible by 5, the remainder is 3 and when the same number is divided by 7 the remainder is 4. What is the least possible number?

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1-??(gettin egfh as a square..nt possible..pls let me know the answer:roll:

2-95

3-b

4-a

5-b

6-c

7-b

8-18

Quant:

1. Given a series -3, -2, -1, 1, 2, 3..... Find the 69th term of the series?

2. If $ca = p + q = a$ & $ac > 0$, then

Col A: p

Col B: q

3. A group of 1 professor and 3 students have to be made from 4 professor and 5 students.

Col a: Different ways in which the groups can be formed

Col b: 40

4. Given 'N' is a two digit number with 'x' in its unit place, then

Col A: The units digit N^3

Col B: The units digit of x^3

5. If $-1 < x < 0$, then

Col A: x^7

Col B: x^5

6. Which of the following is less than 30% of 1

- A. $3/17$
- B. $1/3$
- C. $22/25$
- D. 0.6
- & so on...

7. Given a series $p_1, p_2, p_3, p_4, \dots$. If $p_1 = 1$ & $p_n = 24 \cdot p_{(n-1)} + 8$, then

Col A: The remainder when p_{66} is divided by 6

Col B: 4

(Here 1, 2, 3, 4, 66, n & n-1 are suffixes)

8. If $-1 < x < 0$, then which of the following will have greater value?

- A. $0.8x$
- B. \sqrt{x}
- C. $(5x)/6$
- D. \sqrt{x}
- & so on.....

9. If the numbers 1, 5, 6, 8 & 9 are used once and are used to form a three digit number 't' and a two digit number 'r', then what is the minimum value of $t - r$?

- A. 56
- B. 58
- C. 70
- D. 73
- & so on...

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Quant:

1. If $g(x) = 3^{(x-1)}$, then what is the value of $[g(x+1) - g(x)]/2$?

2. There are two similar cylinders. One cylinder 'A' has water filled to half of its height and is standing on its base. Other cylinder 'B' is lying down with water filled to two third of its height (i.e. its diameter).

Col A: Volume of the Cylinder A

Col B: Volume of the Cylinder B

3. Find the probability of getting an even number, when chosen between 1 to 10 numbers inclusive is?

4. If $-1 < x < 0$, then which of the following is greatest?

- A. x
- B. $2x$
- C. x^3
- D. $1/x$
- E. $1/(x^2)$

5. If there is a series in which the first number A_1 is 4 and $A_{n+1} = (A_n - 3)^2$, then what is the 25th number ?
(Here 1, n, n+1 are suffixes)

6.If the average of 6, x and y is 0, then what is the average of x and y?

7.If $5 + 2x > 1$, then

Col A: x

Col B: -1.999

8.If n is a [positive integer](#), then

Col A: Remainder when $n^2 - n$ is divided by 2

Col B: 0

9.If a hexagon is inscribed in a circle and all the sides are equal and angles are equal of the hexagon, then what is the perimeter of the hexagon in terms of the circle's diameter 'd'?

10.A certain game has multiple rounds, in each round a participant receives either 2 points or 4 points, the average points received by one particular participant for all the rounds is 2.2

Col A : 9 times the number of rounds in which the participant got 4 points Col B: the number of rounds in which the participant got 2 points

11.Two lists were given:

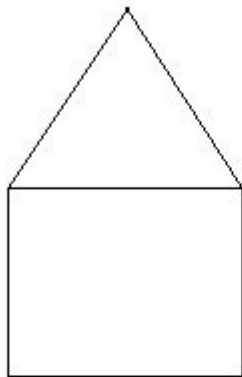
A: 12, 10, 30, 35 & 40

B: 30, 50, 20, 10 & 60

Col A: Standard Deviation of A

Col B: [Standard Deviation](#) of B

12.



Given a polygon (an equilateral triangle above a square) as above with 5 sides, if the perimeter of this polygon is 30, then find the area of the polygon?

13. Given one triangle whose arms are 3 and 5. If its angles are less than 90, then find the range of other arm?

14. Find the greatest of all?

A. $2/7$

B. $71/280$

C. $21/72$

& so on....

15. Col A: Standard deviation of 50, 60, 70, 80 & 90

Col B: Standard deviation of 50, 55, 70, 85 & 90.

16. Given a rectangle whose length 'l' and breadth 'b' is made, such that its length is increased by 15% and its breadth is been decreased by 15%. Col A: Area of original rectangle

Col B: Area of rectangle after change in dimensions

17. Given an equation of the form $[x+3] \leq 5$ ([] implies mod) and there were number lines given

A. Number line saying x lies between -2 to 8

B. Number line saying x lies between -2 to 2

C. Number line saying x lies between -8 to 2

D. Number line saying x lies between -8 to 8

& so on....

18. Given X1, X2, X3 can do a job together in 4 hrs. If X1, X2 can do the same job in 6hrs, then how long would it take for X3 to do the job alone?

19. If in a team of 100, 70 liked cricket, 80 liked football and 5 liked neither, then how many people did like cricket but not football?

Admin,

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Last edited by admin on Tue Nov 11, 2008 9:35 am; edited 1 time in total

1. 3^{x-1}

2. ??

3. $1/2$

4. C

5. 4

6. -3

7. D

8. C

9. 3d (Join the vertices of the hexagon to the center of the circle, then there will 6 equilateral triangles with each side measuring $(d/2)$)

10. C

11. B

12. 35.8

- 13. >2 & <8
- 14. C
- 15. B
- 16. A
- 17. C
- 18. 12hrs
- 19. 15

Please verify the answers.

$$1-3^{(x-1)}$$

2-c(as they have jus asked the volume abd the cylinders are similar so water content is immaterial..i

tink 🤪)

$$3-1/2$$

$$4-e$$

$$5-4$$

$$6- -3$$

$$7-d$$

$$8-c$$

$$9-3d$$

$$10-??$$

$$11-a$$

$$12-36+\sqrt[3]{4(36)}\dots\text{so answer is }9(4+\sqrt[3]{3})$$

$$13-\text{between }3\text{ and }5..(\text{nt sure})$$

$$14-c$$

$$15-a$$

$$16-a$$

$$17-??$$

$$18-12\text{hrs}$$

$$19-15$$

$$1-3^{(x-1)}$$

2-c(as they have jus asked the volume abd the cylinders are similar so water

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$$3-1/2$$

$$4-e$$

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$$6- -3$$

$$7-d$$

$$8-c$$

$$9-3d$$

$$10-??$$

$$11-a$$

$$12-36+\sqrt[3]{4(36)}\dots\text{so answer is }9(4+\sqrt[3]{3})$$

$$13-\text{between }3\text{ and }5..(\text{nt sure})$$

$$14-c$$

$$15-a$$

$$16-a$$

$$17-??$$

$$18-12\text{hrs}$$

$$19-15$$

$$1-3^{(x-1)}$$

2-c(as they have jus asked the volume abd the cylinders are similar so water

content is immaterial..i tink 🤪)

3-1/2

4-e

5-4

6- -3

7-d

8-c

9-3d

10-??

11-a

12- $36 + \sqrt{3/4(36)}$...so answer is $9(4 + \sqrt{3})$

13-between 3 and 5..(nt sure)

14-c

15-a

16-a

17-??

18-12hrs

19-15

12- it shud be 51.58...side of square and triangle is 6 not 5..perimeter is given as 30..and the '5' marked on the figure indicates no. of sides..

there 5 5 sides to the figure

so $5x=30$

$x=6$

the answer shud be 51.58 pls verify

Q 13 says that the triangle has all its angles < 90 . So we have to take this constraint into account. if we take the side too small or too large then one of the angle will exceed 90. so the range will be

$$\sqrt{25-9} > x < \sqrt{25+9}$$

How?

Take the limiting cases.

Case 1

5 and 3 are perpendicular so the third side forms the hypotenuse so its maximum length is $\sqrt{25+9}$

Case 2

3 and the third side are perpendicular and the side having length 5 is the hypotenuse so its minimum length of the third side is $\sqrt{25-9}$

So the range is $\sqrt{25-9} > x < \sqrt{25+9}$

If the question is correct then the answer will be C

If the question is

Col A: Volume water of the Cylinder A

Col B: Volume water of the Cylinder B

Then the answer is Col B.

How?

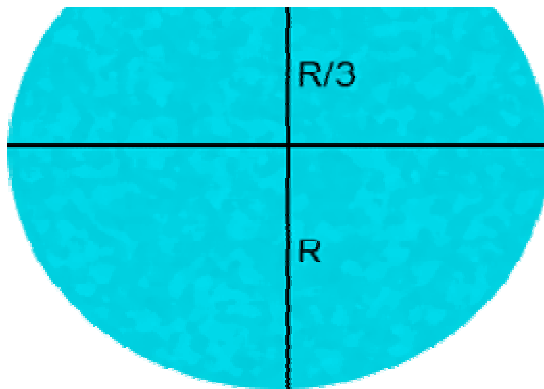
Easy way :

Since both are similar cylinders both will have same volume and if the volume of water in cylinder B is same as cylinder A is same then it would also have occupied half of the height (i.e. diameter) of cylinder B but since it is occupying more than half the volume of water in Cylinder B is greater than that of cylinder A

Mathematical Way:

The volume of water in Cylinder A is $\frac{1}{2} \pi R^2 H$

and the volume of water in cylinder B is area of the portion of the base of the cylinder in contact of water. see picture below



So the volume is $\frac{1}{2} \pi R^2 H + \text{area of the portion above the semicircle} \times H$. Since in Col B some extra volume is added to it, Col B is greater than Col A

i think ans for q 13 is 3-5.

given sides are 3 and 5 & condition is it is an acute triangle..

sum of any two sides of triangle are more than third side. to satisfy that $x+3>5$so... $x>2$..this means lower limit is 3..

to find the maximum limit, let us consider it be the largest side in the triangle (corresponding to hypotenuse in right angle triangle)....since, it is acute triangle $x^2 < 3^2+5^2$which leaves almost $x<6$...so, upper limit is 5....

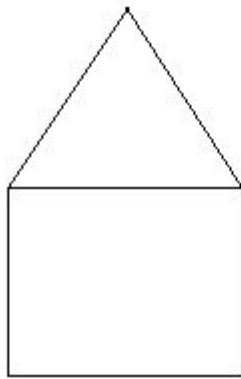
so range is 3-5..

let me know if im wrong anywhere

Quant:

1. There are two names given JOHNSON and TONY. If one letter is picked from both simultaneously at random, then find the probability that the letter is same?

2.



Given a polygon(an equilateral triangle above a square) as above with 5 sides, if the perimeter of this polygon is 30, then find the area of the polygon?
(@all: this is the appropriate question)

3. There are more than 100 boys in a class, and the 100 have been graded of which 22 are awarded 'A' grade. If 25% of total students can be awarded 'A' grade, then find the number of ungraded students if all ungraded were awarded 'A' grade?

4. Given the median of two classes are as follows.

Median of a class of 45 students = 53

Median of a class of 34 students = 40

Find the median if both classes are combined?

5. If the probability of getting females in a group of people is $\frac{3}{5}$, then

Col A: Ratio of male to female in that group

Col B: $\frac{3}{2}$

6. If Raymond earns 'd' dollars/hr & works for 'h' hrs and Andrew earns half as that of Raymond, working at the same rate, then find Andrew's earning after 'h+50'hrs in terms of h and d?

7. If $40 < x < 49$ and x^2 has 6 as unit digit, then

Col A: Value of 'x'

Col B: 45

8. If a wheel 'A' has half the diameter of wheel B, then

Col A: Number of revolutions made by wheel A to cover 5000 miles

Col B: Number of revolutions made by wheel B to cover 2500 miles

9. Given a circle with a marked arc with radius given and asked to compare the area of arc with some value.

10. If 'n' is a positive & odd integer, then

Col A: number of odd numbers below 'n'

Col B: $(n-1)/2$

11. Given x, y as integers. If $A = 896 \cdot 355 \cdot (x-1)(y+2)$, then

Col A: Value of A

Col B: 0

12. Given an equilateral triangle PQR and a line is drawn dividing two of its sides as 2, 6 at 'S' and 'T' and then asked to find the area of shaded region { given that both PQR and PST are equilateral triangle}.

13. If the numbers 1, 5, 6, 8 & 9 are used once and are used to form a three digit number 't' and a two digit number 'r', then what is the minimum value of $t - r$?

A. 56

B. 58

C. 70

D. 73

& so on...

14. If $-1 < x < 0$, then which of the following is greater?

A. x

B. x^3

C. $1-x^3$

& so on.....

15. Col A: Interior angle of a polygon of 5 sides

Col B: Interior angle of a polygon of six sides

16. Given two spheres, one sphere 'X' of radius 'x' and other sphere 'Y' of radius $9x$.

Col A: Volume of sphere 'X'

Col B: Volume of sphere 'Y'

17. Given a series $p_1, p_2, p_3, p_4, \dots$. If $p_1 = 1$ & $p_n = 24 \cdot p_{(n-1)} + 8$, then

Col A: The remainder when p_{66} is divided by 6

Col B: 4

(Here 1, 2, 3, 4, 66, n & n-1 are suffixes)

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1 2/5 -not sure

2 $30/5=6$ $6 \times 6=36$ $1/2 \times 5 \times 6=15$ summ=51

3 66....

4 68 !?

5 a




6 $(1/2d h + 25) / h$

7 a

8 d

10 c

11 at the end $a = 2+y$ answer D
13 b
14 a ? pls verify
15d
16 b
17 b

1. 2/7 (not sure)
2. 51.66
3. 
4. 46.5
5. B
6. $(1/2d + 25d)$
7. D
8. A
9. 
10. C
11. D
12. 26.1 (area of SQRT)
13. B
14. C
15. A
16. B
17. 

Col B is greater. because the first term is P_n is multiplied by 24 so it will give remainder 0 when divided by 6 but the +8 in the end will give remainder 2.

However $P_{66} = 24^{66} + 8 \cdot 24^{65} + 8 \cdot 24^{64} + \dots + 8 \cdot 24 + 8$

- 1-2/7..nt sure
2-51
3-??
4-46.5
5-b
6-d/2(h+50)
7-a
8-c
10-c
11-d
12-25.98
13-b
14-c
15-b
16-b
17-b

7. If $40 < x < 49$ and x^2 has 6 as unit digit, then
Col A: Value of 'x'
Col B: 45

$x=44 \times 2 = 1936$ 6 as unit digit
 $x=46 \times 2 = 2156$ 6 as unit digit
so value of x 44 or 46
so answer D

8. If a wheel 'A' has half the diameter of wheel B, then
Col A: Number of revolutions made by wheel A to cover 5000 miles
Col B: Number of revolutions made by wheel B to cover 2500 miles

wheel B larger circumference and smaller distance takes lesser revolutions than wheel A having smaller circumference and larger distance.
Answer A

3. Given the median of two classes are as follows.
Median of a class of 45 students = 53
Median of a class of 34 students = 40
Find the median if both classes are combined?

median is $53+40/2=93/2=46.5$
this is cos median of even number of values is the average of the middles 2 numbers and here there are only 2 values.
Hope dat da explanation and answer is rite

8- it shud be 'C'..consider the followin
wheel a wheel b
d as dia 2d as diameter
 $\text{circum}=\pi*d$ $\text{circum}=2*\pi*d$
 $\text{dist}=\pi*d*5000$ $\text{dist}=2*\pi*d*2500=5000*\pi*d$

hence answer is c..correct me if m wrong ?

8- it shud be 'C'..consider the followin
wheel a wheel b
d as dia 2d as diameter
 $\text{circum}=\pi*d$ $\text{circum}=2*\pi*d$
 $\text{dist}=\pi*d*5000$ $\text{dist}=2*\pi*d*2500=5000*\pi*d$

hence answer is c..correct me if m wrong ?

8- it shud be 'C'..consider the followin
wheel a wheel b
d as dia 2d as diameter
 $\text{circum}=\pi*d$ $\text{circum}=2*\pi*d$
 $\text{dist}=\pi*d*5000$ $\text{dist}=2*\pi*d*2500=5000*\pi*d$

hence answer is c..correct me if m wrong

According to me, distance travelled = circumference of da wheel x no. of revolutions
e.g if we consider, wheel A wid diameter 2 and wheel B wid diameter 4
then
 $C(A)= 3.14*2$
 $C(B)=3.14*4$
no. of rotations by A = $\text{dist}/\text{circumference}$
 $=5000/6.28=796$
no. of rotations by B = $2500/12.58=198$

hence, answer is A

Quant:

1. A Rectangular floor is made up of 'M' rows and 'M+4' columns fully made up of square tiles.

Col A : The difference between the number of tiles in the 21st row and 26th column

Col B: $M^2 + 2M + 2$

2. Given a rectangle field whose length 'l' and breath 'b' is made area = 25000, such that its length is increased by 10% and its breadth is been decreased by 5 %.

Col A: Change in area of the rectangle

Col B: 1200

3. Given $n = x^{(2x)}$, where 'x' is a negative number.

Col A : n

Col B: 0

4. If $g(x) = 3^{(x-1)}$, then what is the value of $[g(x+1)-g(x)]/2$?

5. There are two similar cylinders. One cylinder 'A' has water filled to half of its height and is standing on its base. Other cylinder 'B' is lying down with water filled to two third of its height (i.e. its diameter).

Col A: Volume of the Cylinder A

Col B: Volume of the Cylinder B

6. If the average of 6, x and y is 0, then what is the average of x and y?

7. If $5 + 2x > 1$, then

Col A: x

Col B: -1.999

8. Which of the following is less than 30% of 1

A. $\frac{3}{17}$

B. $\frac{1}{3}$

C. $\frac{22}{25}$

D. 0.6

& so on...

9. Given a right angle triangle ABC where AC is the hypotenuse. Two points are marked on the line AB as 'E' and 'M', such that $AE = EM = MB$ & similarly on AC two points 'F' and 'N' are marked, such that $AF = FN = NC$. If the area of triangle AEF is 12, then find the area of the triangle ABC?

(Given question is similar to this)

10. Given numbers from 1 to 10. Two numbers are to be selected from these 10 numbers and they can be same also. What is the probability that at least one of them is even?

A. $1/2$

B. $3/4$

C. $1/4$

& so on....

11. Given a series $p_1, p_2, p_3, p_4, \dots$. If $p_1 = 1$ & $p_n = 24 \cdot p_{n-1} + 8$, then

Col A: The remainder when p_{66} is divided by 6

Col B: 4

(Here 1, 2, 3, 4, 66, n & n-1 are suffixes)

12. Given average of a & b as 10. When 'c' is added to a & b, then the average is 10 (again).

Col A: Value of 'c'

Col B: 10

13. If the sum of $5Y2$ and 257 is $8N9$, then what is the least possible values of N and Y

Col A: $Y+N$

Col B: 9

(something similar to this)

14. A girl has several pigeons and she uses 'W'kg grains to feed them for a week. If a single pigeon consumes 'K'kg per day, then

Col A: The total Number of pigeons

Col B: $7W/F$

15. Col A: $(2^x)(4^x)$

Col B: (2^{3x})

16. Given a pentagon having perimeter 30 and asked to find the area of  the pentagon?

17. Col A: 2^{-3}

Col B: 3^{-2}

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1. D
2. A
3. A
4. $3^{(x-1)}$
5. C
6. -3
7. D
8. A
9. ?
10. A. $1/2$
11. B
12. C

13.B
14.??
15.C
16.51.66
17.B

1 b
2 d
3 a
4 $3x$
5 d ???
6 -3
7 b
8 a
9 i try to solve but totally mixed all up... could someone help . i get equation $12=1/2a^2$
10 a
11 b
12 c
13 b
14 what does F mean ..i guess $7W/\text{number of days } C$
15 d
16 7776
17 c

2. Given a rectangle field whose length 'l' and breath 'b' is made area
=25000, such that its length is increased by 10% and its breadth is been decreased by 5 %.

Col A: Change in area of the rectangle
Col B: 1200

the length $l=500$ breadth $b=50$ $l \times b=25000$
new length $L = 500 + 10/100 \times 500 = 550$
new breadth $B = 50 - 5/100 \times 50 = 47.5$
new area $L \times B = 550 \times 47.5 = 26125$
so $26125 - 25000 = 1125$
answer is B.

5.C.
 Cylinders considered similar and asked for volume of
 cylinders not volume occupied by water or remaining
 volume.

7. If $5 + 2x > 1$, then
Col A: x
Col B: -1.999

$5 + 2(-1.999) = 5 - 3.998 = 1.002 > 1$
 $5 + 2(2) = 5 + 4 = 9 > 1$
answer=D

15. Col A: $(2^x)(4^x)$
Col B: (2^{3x})

According 2 me,
 $(2^x)(4^x) = (2^4)^x = 8^x$
 $2^{3x} = 8^x$
answer C

16. I think the question is about the pentagon made of an equilateral triangle on a square as in nov 11 database

17. Col A: 2^{-3}
Col B: 3^{-2}
 $2^{-3} = 1/2^3 = 1/8 = 0.125$
 $3^{-2} = 1/3^2 = 1/9 = 0.111$
answer is A

please correct if wrong..... 😊

@tuffgre

The pentagon problem, here u cannot get 5 equilateral triangles because each interior angle will be 108 and u will only be able to get 5 isosceles triangles. I think there is a different approach to this problem.

Other answers are correct.

Can u pls explain the solution to the 1st problem.

Thnx.

1. The answer is B. Col B is greater than Col A

As it is given in the question the rectangle contains 'M' rows and 'M+4' columns. Each row contains 'M+4' square tiles and each column contains 'M' square tiles. So the difference is 4 for all values of rows and columns and 'M'. As the question has asked the difference between the number of tiles in the 21st row and 26th column. There must be at least 22 rows in the rectangular floor. So Minimum value of M is 22. In this case Col B will be $21^2 + 2 \cdot 21 + 2$ which will be obviously greater than 4

2. Answer is B. Column B is greater

$L \cdot B = 25000$
 $L \cdot 1.1 \cdot B \cdot 0.95 = A$ (New area)
 $L \cdot B \cdot 1.1 \cdot 0.95 = A$
Change in area = $A - 25000$
 $= 25000 \cdot 1.1 \cdot 0.95 - 25000$
 $= 25000(1.1 \cdot 0.95 - 1)$
 $= 25000(1.045 - 1)$ (Easy multiplication $11 \cdot 95$)
 $= 25000 \cdot 0.045$
 $= 1125$ (Another easy multiplication $25 \cdot 45$)

5. If the question is correct then the answer will be C

If the question is

Col A: Volume water of the Cylinder A
 Col B: Volume water of the Cylinder B

Then the answer is Col B.

How?

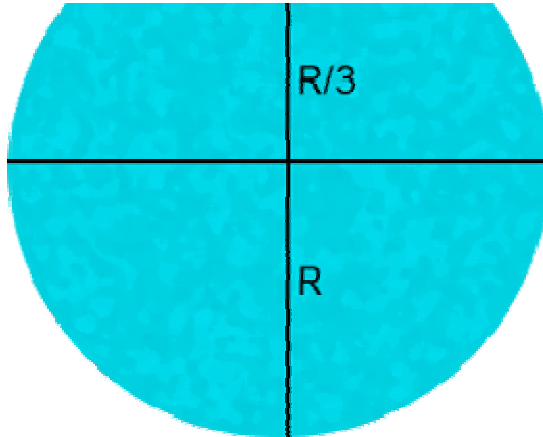
Easy way :

Since both are similar cylinders both will have same volume and if the volume of water in cylinder B is same as cylinder A is same then it would also have occupied half of the height (i.e. diameter) of cylinder B but since it is occupying more than half the volume of water in Cylinder B is greater than that of cylinder A

Mathematical Way:

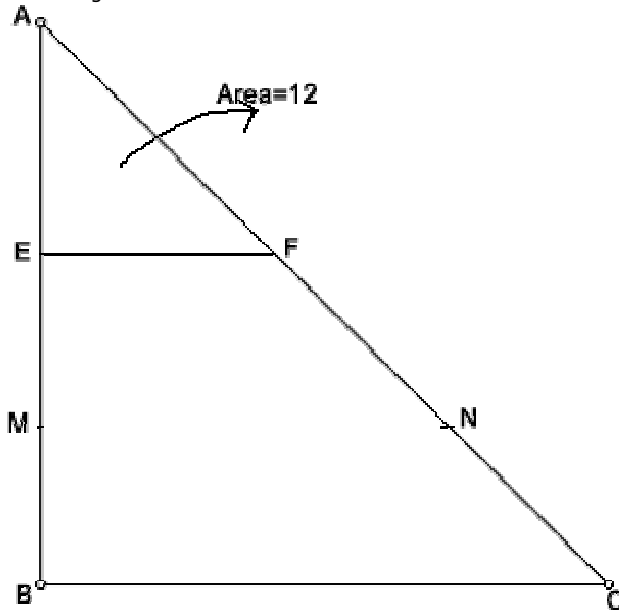
The volume of water in Cylinder A is $\frac{1}{2} \pi R^2 H$

and the volume of water in cylinder B is area of the portion of the base of the cylinder in contact of water. see picture below



So the volume is $\frac{1}{2} \pi R^2 H + \text{area of the portion above the semicircle} \times H$. Since in Col B some extra volume is added to it, Col B is greater than Col A

9. The figure will be like this



Now the triangle AEF and ABC will be similar. and as the side of triangle ABC are three times that of AEF we have

$$AB=3*AE$$

$$BC=3*EF$$

$$\text{Given } 0.5 * AE * EF = 12$$

$$\text{we need to find } 0.5 * AB * BC = 0.5 * 3*AE * 3*EF$$

$$\text{Area of ABC} = 9*12 = 108$$

14. W Kg for & days. So per day it will be W/7.

1 pigeon eats K Kg.

W/7 Kg will be eaten by W/7K pigeons

16. Important Area of Pentagon = $1.72 * \text{Side}^2$

$$\text{Given Perimeter} = 30$$

$$\text{Side} = 30/5 = 6$$

$$\text{Area} = 1.72 * 36 = 62 \text{ (Approx. One doesn't need a calculator for that I suppose)}$$

17.

$$2^{-3} = 1/8$$

$$3^{-2} = 1/9$$

No need of further simplification (As done by tuffgre). As the denominator is smaller in Col A it is greater than Col B.

1-?? pls explain...jitun i din understan your approach 😞

2-b

3-a

$$4-3^{(x-1)}$$

5-c

6- -3

7-d

8-a

9-108

10-b??(nt sure)

11-b

12-c

13-b

14-same as jitun

15-c

16-if its a regular pentagon then side of the is 6 and formula for area is $5 * \text{area of equilateral triangle} = 5 * 36(\text{root } 3/4)$

17-a

1-?? pls explain...jitun i din understan your approach 😞

2-b

3-a

$$4-3^{(x-1)}$$

5-c

6- -3

7-d

8-a

9-108

10-b??(nt sure)

11-b

12-c

13-b

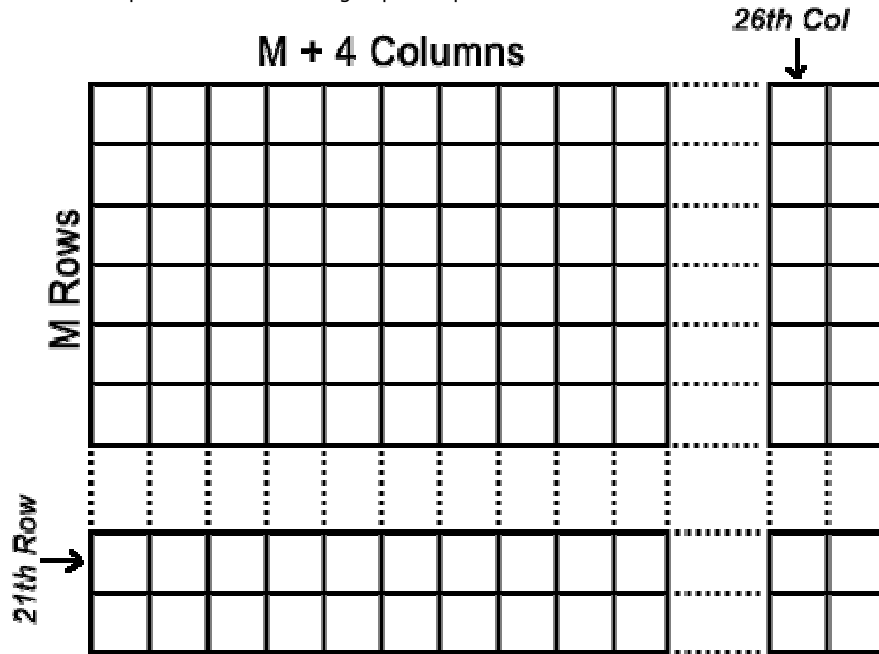
14-same as jitun

15-c

16-if its a regular pentagon then side of the is 6 and formula for area is $5 * \text{area of equilateral triangle} = 5 * 36(\text{root } 3/4)$

17-a

I think this picture will clear things up. See picture below



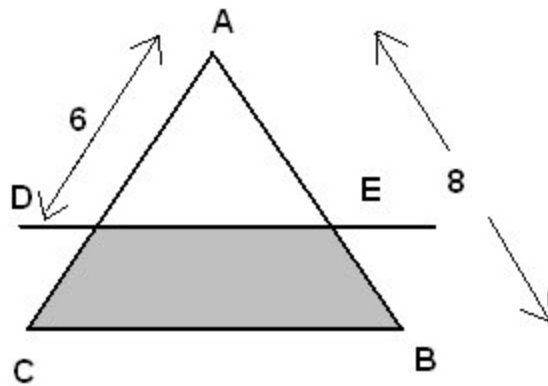
It is evident from the pic that all rows will have $M+4$ squares and all columns will have M squares. So the difference will be always $M+4-M=4$

But as we are talking about 26th row in the question, then there must be at least $26-4=22$ columns in the rectangular floor. So M will have minimum value 22. When M is 22, the expression M^2+2M+2 will be obviously greater than 4. I hope you are clear now.

Find the probability that none of them are even i.e. both are odd. Since there are 5 odd numbers, this amounts to a probability of $\frac{5}{10} \times \frac{5}{10} = \frac{1}{4}$. Hence, the answer is $1 - \frac{1}{4} = \frac{3}{4}$.

Quant:

1.



Given that triangle ABC and AED are equilateral triangles, if $AB = 8$ & $AD = 6$, then find the area of the shaded region BCDE?

2. There are two plants 'A' & 'B'. The plant 'A'

In, 1st week grows $1/4$ th

2nd week grows $1/5$ th

3rd week grows $1/6$ th

4th week grows $1/7$ th

5th week grows $1/8$ th

6th week grows $1/9$ th

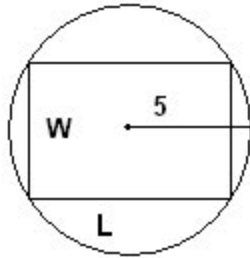
& if plant B grows $3/4$ th in these 6 weeks period, then

Col A: Growth of plant 'A' in 6 weeks

Col B: Growth of plant 'B' in 6 weeks.

(Question is similar to this)

3.



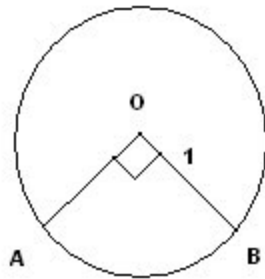
Which of the following is true?

- A. $L^2 + W^2 = 50$
- B. $L^2 + W^2 = 25$
- C. $L^2 + W^2 = 100$
- D. $L^2 + W^2 = 75$
- E. $L^2 + W^2 = 125$

4. For $n > 0$, which of the following options cannot be unit digit of the value $2^n - 1$?

- A. 1
 - B. 2
 - C. 3
 - D. 9
- & so on....

5.



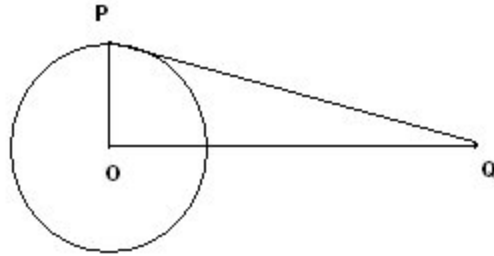
Find the perimeter of the arc AOB ?

6. If $3x + y = 12$ & $x + y/3 = 4$, then

Col A: x

Col B: y

7.



Given a figure as above with a point 'Q' outside the circle

Col A: OP

Col B: OQ

8. If a rectangle's length is increased by 15% and width is decreased by 15% , then

Col A: Area of the initial rectangle

Col B: Area of the later(changed) rectangle.

9. Col A: $\sqrt{120} + \sqrt{50}$

Col B: $\sqrt{80} + \sqrt{90}$

10. If $0 < M < N < P < Q < R$, then

Col A: Median of M, N, P, Q & R

Col B: Arithmetic Mean of M, N, P, Q & R.

11. If $x^2 - 36 = 0$ & $x(x+6)(x+8) = 0$, then

Col A: x

Col B: 0

12. How many numbers between 400 and 700 are multiples of both 2 & 3?

13. A rectangular solid with length 40m, height 2m & width 10m is given. Find the volume of the rectangular solid in cubic centimeter??

14. Col A: The distance from origin to (3, 4)
Col B: The distance from origin to (5, 2)

15. Given a rectangle field whose length 'l' and breath 'b' is made
 area=25000, such that its length is increased by 10% and its breadth is been decreased by 5%.

Col A: Change in area of the rectangle
Col B: 1200

16. If Raymond earns 'd' dollars/hr & works for 'h' hrs and Andrew earns half as that of Raymond, working at the same rate, then find Andrew's earning after 'h+50'hrs in terms of h and d terms?

17. If a wheel 'A' has half the diameter of wheel B, then
Col A: Number of revolutions made by wheel A to cover 5000 miles
Col B: Number of revolutions made by wheel B to cover 2500 miles

18. Last year, few girls and boys participated in drama. This year the number of girls and boys increased by $x(x>0)$. If the number of boys is greater than number of girls, then
Col A: Percentage increase in boys from last year to this year
Col B: Percentage increase in girls from last year to this year

19. If the length of a rectangle is increased by 10% and its width is decreased by 10%, then what is the new area of the rectangle?
A. Increased by 10%
B. Increased by 1%
C. Remains same
D. Decreased by 1%
E. Decreased by 10%

20. Which of the following is less than 30% of 1
A. $\frac{3}{17}$
B. $\frac{1}{3}$
C. $\frac{22}{25}$
D. 0.6
& so on...

21. If the sum of 5Y2 and 257 is 8N9, then what is the least possible values of N and Y
Col A: Y+N
Col B: 9

22. If $-1 < x < 0$, then which of the following is greater?
A. x
B. x^3
C. $1-x^3$
& so on.....

23. If $g(x) = 3^{(x-1)}$, then what is the value of $[g(x+1)-g(x)]/2$?

24. If the numbers 1, 5, 6, 8 & 9 are used once and are used to form a three digit number 't'

and a two digit number 'r', then what is the minimum value of $t - r$?

A. 56

B. 58

C. 70

D. 73

& so on...

25. A circle has centre (0, 2) and a point P (2,-1) lies on its circumference.
What is the radius of the circle?

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color=cyan]1 28sqrt3/4

2 B

3 B

4 A 🤖

5 $\pi/2$

6 C

7 b

8 b

9 c - ?

10 d

11 my solvation takes a long time, please advise the way u solve

12 6

13 800

14 b

15 a

16 $d(h+50)/h$ please verify...

17 B

18 d

19 e

20 a

21 b

22 C

23 $-1/2$

24 b

25 6[/color]

1. $7\sqrt{3}$

2. A

3. C

4. B

5. 3.57

6. B

7. B (think question shud compare OQ and QP)

8. A

9. B

10.D
11.D
12.30
 13.8×10^8 (800000000)
14.B
15.B
 $16.d/2(h+50)$
17.A
18.D
19.D
20.A
21.D
22.B
 $23.3^{(x-1)}$
24.B
25.10

1-7root3
2-a
3-c
4-d
5-1.57
6-c
7-b
8-a
9-c..(nt sure..pls explain sum easy method for square roots)
10-d
11-b
12-50
13-800000000
14-b
15-b
 $16.d/2(h+50)$
17-a
18-d
19-d
20-a
21-b
22-c
 $23-3^{(x-1)}$
24-b
25-root 13..distance formula u get $\text{root}\{(0-2)^{(3)^2}\}=\text{root } 13$

1-7root3
2-a
3-c
4-d
5-1.57
6-c
7-b
8-a
9-c..(nt sure..pls explain sum easy method for square roots)
10-d
11-b
12-50

13-800000000

14-b

15-b

16- $d/2(h+50)$

17-a

18-d

19-d

20-a

21-b

22-c

23- $3^{(x-1)}$

24-b

25-root 13..distance formula u get $\sqrt{(0-2)^2 + (3)^2} = \sqrt{13}$

For the 4 question, for what value of 'n' do we get the units digit=9 ?

6 question, both the equations are the same, so ans will be D rite?

11, condition is $x^2 - 36 = 0$ & $x(x+6)(x+8) = 0$, so x will be -6 rite, so answer will be B

18, solution is B, girls and boys increase by the same value 'x'

21. solution is B (least value is 5)

25, radius is $\sqrt{13}$ rite? How did u get 10??

The question seems incorrectly formed. The unit digits of powers of 2 repeats in the sequence 2,4,8,6 . Now if the [question](#) is $(2^n) - 1$ then the unit place can have any number 1,3,7,5. if it is asking for $2^{(n-1)}$ then the unit [digit](#) can have any value from 1(for n=1),2,4,8,6. But here we are assuming another constraint, that is n is an integer but it is nowhere specified in the question. So if we take n as any real number greater than 0 then the unit place can have any value from 0 to 9.

25. it is $\sqrt{13}$. Thanz

21. If the sum of 5Y2 and 257 is 8N9, then what is the least possible values of N and Y

Col A: Y+N

Col B: 9

Answer: Here Y can take any values btwn 0 to 4

if we consider dat, we get,

$Y=0, N=1+5=6$

and $Y+N = 0+6 = 6$

similarly if $Y=4$ then $N=4+5=9$

and $Y+N = 4+9 = 13$

so, the value of Y+N can be between 6 to 13 and the answer is D.

8. Even though the increase is given to be same (x), they have mentioned the number of boys is greater than girls. I may be wrong but the percentage increase depends on the original value and as it is not mentioned I think the answer is D.

11. $x^2 - 36 = 0$ gives $x = +6$

6. D.

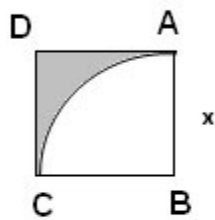
5. perimeter of arc AOB = length of arc + 2r
length of arc = $\frac{90}{360} \times 2\pi r$
= 1.57
 $1.57 + 2 = 3.57$

plz correct if I am wrong

Quant:

1. If from 1982 to 1990, a company made 210000\$ profit & from 1988 to 1992 the same company made 180000\$ profit, then what is the profit the company made between 1988 and 1990?

2.



Given a figure as above, with a square ABCD of side 'x'

Col A: Area of shaded region

Col B: $x^2/4$

3. If $B_n = (-1)^n (T)^{n-1}$, then find B5?

Col A: $-1 - t^2 - t^3 - t^4$

Col B: $-1 + t^2 - t^3 + t^4$

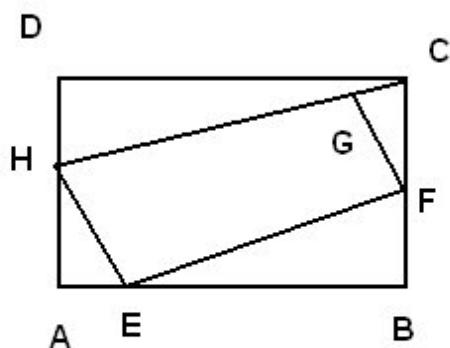
4. Find the closest value of a100, if $a_n = \frac{n^4 + (n+100)^2}{xxx}$ (some bigger value).
(Question is similar to this)

5. Which of the following is less than 30% of 1

- A. $\frac{3}{17}$
- B. $\frac{1}{3}$
- C. $\frac{22}{25}$
- D. 0.6

6. The value of $208 + \frac{1}{2} (208) + \frac{1}{4} (208)$ is

7.



Given a figure similar to the above, as EFGH inscribed in ABCD, 'E' on AB, 'H' on AD; 'F' is on BC and is the midpoint of BC & a line segment connecting H and C. The point where 'F' intersects HC is G. Here E and H are not mid-pts of respective sides as "F". If angle DHC=45 and side AE=5, then find the area of

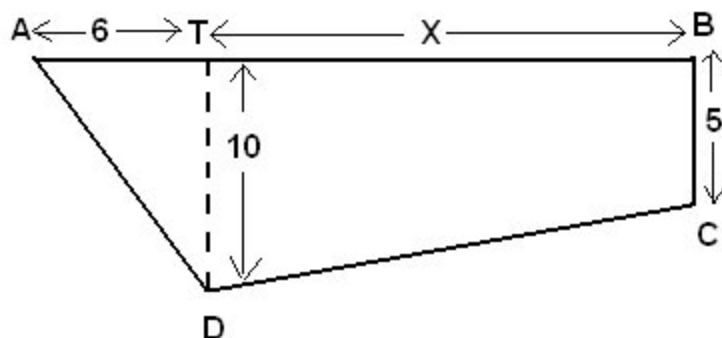
rectangle EFGH?

8. Given two points A(3, 1) & B(-1, 5) and a perpendicular is drawn from point 'p' to this line AB

Col A: Slope of the perpendicular line

Col B: 1

9.



If the area of ABCD is 180, then find the value of 'X'?

10. What is the highest prime factor of $3^{100} - 3^{97}$?

11. Col A: $\sqrt{120} + \sqrt{50}$

Col B: $\sqrt{80} + \sqrt{90}$

12. If $0 < M < N < P < Q < R$, then

Col A: Median of M, N, P, Q & R

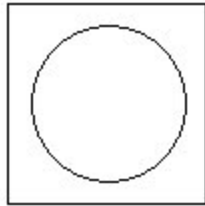
Col B: Arithmetic Mean of M, N, P, Q & R.

13. If perimeter of a rectangle A is 20 & perimeter of rectangle B is 24, then

Col A: Area of the rectangle

Col B: Area of the rectangle

14.



Given a figure as above with circle inside a square, if the area of the square is 16, then

Col A: Area of circle

Col B: 4π

15. If 61% supports 'X' and 55% supports 'Y' and out of those who support 'Y' 80% also supports 'X', then what percentage of people supports neither 'X' nor 'Y'?

16. If the probability of getting females in a [group of people](#) is $\frac{3}{5}$, then

Col A: Ratio of male to female in that group

Col B: $\frac{3}{2}$

17. Given x, y as integers. If $A = 896 \cdot 355 \cdot (x-1)(y+2)$, then

Col A: Unit digit of A

Col B: 0

18. Given an equation of the form $[x+3] \leq 5$ ($[]$ implies mod) and there were number lines given

A. Number line saying x lies between -2 to 8

B. Number line saying x lies between -2 to 2

C. Number line saying x lies between -8 to 2

D. Number line saying x lies between -8 to 8

& so on....

19. Given three variables a, b & c which can take any of the three values 0, 1 or 2. If $a^2(9) + b(3) + c = 25$, then what is the value of $a + b + c$?

A. 3

B. 5

C. 8

D. 9

20. If $x > 0$, then

Col A: $[(2x)^0 + (2x)^1] / [(2x) + (2x)^2]$

Col B: $(2x)^{-1}$

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1. ??
2. B
3. Something wrong with the question
4. Need more data
5. A
6. 364
7. 100
8. C
9. 20
10. 13
11. B
12. D
13. D
14. B
15. 28
16. B
17. C
18. C
19. Something wrong with the question
20. C

It is given area of ABCD=180

If you look at ABCD, it is actually composed of 2 areas, area of triangle ADT+area of quadrilateral BCDT

$$\Rightarrow (0.5 \cdot 6 \cdot 10) + 0.5 \cdot (10+5) \cdot x = 180$$

$$\Rightarrow 60 + 15x = 360$$

$$\Rightarrow 15x = 300$$

$$\Rightarrow x = 20$$

Hope its clear to u. When is your GRE?

Quant:

1. How many integers are there between 176 and 256, which are not the multiples of 7?
2. Which is the greatest prime factor of $3^{100} - 3^{97}$?
3. Find the area of the square which has its diagonal length 10?
4. The x and y coordinates of two points were given and was asked to find its slope.

5. Given coordinates of two points P, Q on a graph
Col A: Distance of point 'P' from origin
Col B: Distance of Point 'Q' from origin
(Question is similar to this.. with P & Q values given)

6. If 'n' is an integer and $26n$ is a multiple of 12, then
Col A: Value of n
Col B: 11

7. If $x^2 = 9$, then
Col A: $x-2$
Col B: 0

8. Two frequency distribution tables are given.

Table I:

Value Frequency

-1 2

-2 3

-3 5

0 7

1 1

2 3

3 3

Table II:

Value Frequency

-1 3

-2 1

-3 4

0 6

1 1

2 3

3 4

Out of mean, median & mode which quantity is common for both tables?

- A. Mean only
- B. Median only
- C. Mode only
- D. Median & Mode
- E. Mean & mode

9. There are two plants 'A' & 'B'. The plant 'A'
In, 1st week grows $\frac{1}{4}$ th
2nd week grows $\frac{1}{5}$ th
3rd week grows $\frac{1}{6}$ th
4th week grows $\frac{1}{7}$ th
5th week grows $\frac{1}{8}$ th
6th week grows $\frac{1}{9}$ th
& if plant B grows $\frac{3}{4}$ th in these 6 weeks period, then
Col A: Growth of plant 'A' in 6 weeks
Col B: Growth of plant 'B' in 6 weeks.

10. A company gives a employee code to each of its employees. It consists of 4 alphabets followed by two numbers. All alphabets from A to Z (except A, E, I, O, U, Z) can be used & all numbers from 0 to 9 can be used. How many different possible employee codes can be made using these conditions?

11. A solid has dimensions of 12inchesx20inchesx15 inches. If the solid has a mass of 7kg, then what is the density of the box & its volume in cubic foot?

(Question is similar to this)

12. Two figures R & S given. R is a square with side 9 each & S is a square whose top right quarter part has been cut (it is similar to R just a square part on top right is removed) & have side of 9 each. However the dimension of the area removed from top right quarter is not given.

Col A: Area of R

Col B: $\frac{4}{3}$ of area of S

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Hi All,

1. 68
2. 13
3. 50
4. Need more data
5. Need more data
6. D (gets satisfied for both $n=6$ and $n=12$)
7. D
8. D (Median & Mode are same)
9. A
10. $(20)^4 \cdot (10)^2$
11. volume=3600, density=7/3600
12. C

Please verify the answers.

ColB is 0.75, add the first two values in ColA=0.75+the remaining values, so it makes colA>colB

This is the way I arrived at the solution, I don't know if there is any specific shortcut to this problem.

$$\begin{aligned} 3^{100} - 3^{97} &= (3^{97} \cdot 3^3) - 3^{97} \\ \Rightarrow 3^{97}(3^3 - 1) &= 3^{97}(27 - 1) \\ \Rightarrow 3^{97} \cdot 26 &= 3^{97} \cdot 13 \cdot 2 \end{aligned}$$

So greatest prime factor is 13.

Hope it is clear to u.

Less than a week left now, so started to revise. Howz ur preparation?

hi charan,
can u explain qs 12 please?

and also, qs 11 asked volume in cubic feet.

For 11 i got volume =2.08 cubic feet (approx)
density= 7/2.08
please check.

Quant:

1. Given $a = (m+p)^2$ & $b = (m-p)^2$. If $3^a/3^b = 3^4$, then
Col A: mp
Col B: 1

2. Six amounts are given say 358\$, 600\$, 478\$, 786\$, 900\$ & 983\$. These amounts represent the profit made by 6 people. Out of these 6 values, there is error in 2 of them, one has been increased by 120\$ and one has been decreased by 120\$ by mistake.
Col A: Standard Deviation of the data given
Col B: Standard Deviation of the actual values (without error)

3. Given sides of a triangle, where all angles are less than 90. If one arm is 3 & other is 4, then find the range of third side?

4. If 'N' is a two-digit number with 'x' in tens place and 'y' in units place, then when this number is multiplied by 5 what will be the result?
A. $5xy$
B. $5x+5y$
C. $50x+50y$
D. $50x+ 5y$

5. Two frequency distribution tables are given.

Table I:

Value Frequency

-1 3

-2 3

-3 3

0 7

1 3

2 3

3 3

Table II:

Value Frequency

-1 5

-2 3

-3 2

0 6

1 1

2 3

3 5

Out of mean, median & mode which quantity is common for both tables?

A. Mean only
B. Median only
C. Mode only
D. Median & Mode
E. Mean & mode

6. Given two points A(3, 1) & B(-1, 5) and a perpendicular is drawn from point 'p' to this line AB
Col A: Slope of the perpendicular line

Col B: 1

7. If $x^2 - 36 = 0$ & $x(x+6)(x+8) = 0$, then

Col A: x

Col B: 0

8. If a wheel 'A' has half the diameter of wheel B, then

Col A: Number of revolutions made by wheel A to cover 5000 miles

Col B: Number of revolutions made by wheel B to cover 2500 miles

9. Last year, few girls and boys participated in drama. This year the number of girls and boys increased by $x(x>0)$. If the number of boys is greater than number of girls, then

Col A: Percentage increase in boys from last year to this year

Col B: Percentage increase in girls from last year to this year

10. A circle has center $(0, 2)$ and a point $P(2, -1)$ lies on its circumference. What is the radius of the circle?
(Question is similar to this)

11. If ' k ' is a positive integer, $2^k - 1$ cannot have which of the following as the unit's digit?

A. 1

B. 2

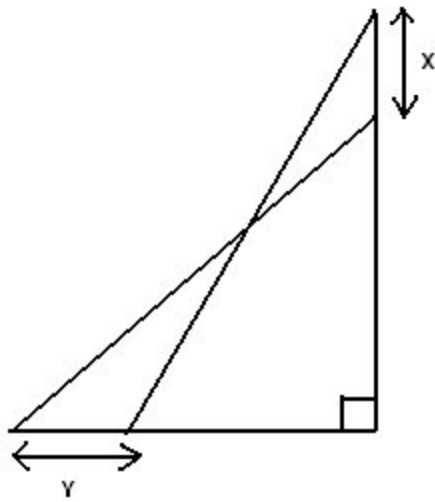
C. 3

D. 9

& so on....

12. Five numbers were given in fractional form, asked to find the least amongst them?

13.



'X' represents the value by which the height decreases and 'Y' represents the value by which the base increases.

Col A: X

Col B: Y

14. A series is given -8, -3, 5, 8, 3, -5...

Col A: The number that would first repeat 3rd time is

Col B: 3

(Something similar to this)

15. If 'n' and 'm' are positive odd integers, then

Col A: $n(m-1)$ when divided by 2

Col B: 1

16. If $x^2 - 49 = 0$, then

Col A: $x-7$

Col B: $x+7$

17. A compass length, breadth & height were given (in inches) and weight of the compass was given as 17 kg and was asked to find density in kg per cubic feet?

(Density = wt/volume and 1 feet = 12 inches was given)

18. Given a point (2, -1) as the center of the circle and (0, -2) is a point on the circle, find the diameter of the circle?

19. In certain event probability of selecting female is $3/5$.

Col A: Ratio of female to male

Col B: $3/2$

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1. C
2. D
3. $x > 1$ & $x < 7$
4. D
5. D
6. C
7. B
8. A
9. B
10. $\sqrt{13}$
11. 2 & 9
12. Need more data
13. D
14. C
15. B
16. B
17. Need more data
18. $2\sqrt{5}$
19. C

Guys pls verify the answers.

Plz check answers for question 14, 15, and 16

14- The series given is simply the first term subtracted from the very next term and it simply gives the third term

so in this way $-3 - (-8) = 5$ (here -8 is first term of the series, -3 is second and 5 is the next to -3)

now

$$5 - (-3) = 8 \text{ ----> first}$$

$$8 - 5 = 3 \text{ ----> first}$$

so the unknownterm after -5 would be

$$-5 - 3 = -8 \text{ ----> second}$$

$$-8 - (-5) = -3 \text{ -----> second}$$

$$-3 - (-8) = 5 \text{ -----> second}$$

$$5 - (-3) = 8 \text{ -----> first}$$

$$8 - 5 = 3 \text{ -----> second}$$

$$3 - 8 = -5 \text{ -----> second}$$

$$-5 - 3 = -8 \text{ -----> third}$$

So Answer should be Col B is greater

Q15- Question data is not complete

As column A do not clear that when $n(m-1)$ is divided by 2 then which quantity is to be compared with Col B (Remainder or Quotient)

if remainder is to be compared with Col. B then Ans is C

if quotient is to be compared with Col B then Ans is D

Q16 - if $x^2 - 49 = 0$ then

$$(x-7)(x+7) = 0$$

so either $x-7=0$ or

$$x+7=0$$

therefore answer should be "C"

$$16. x^2 - 49 = 0, x^2 = 49, x = +7 \text{ or } -7$$

When $x = +7$, $\text{colA} = 0$ $\text{colB} = 14$

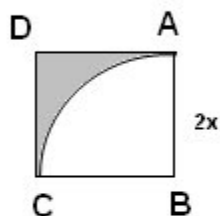
When $x = -8$, $\text{colA} = -14$ $\text{colB} = 0$

Both the cases colB is $>$ colA

14. B, you are right I made a mistake

Quant:

1.



Given a figure as above, with  a square ABCD of side '2x'

Col A: Area of shaded region

Col B: $x^2/4$

2. Which of the following is less than 3% of 1

- A. $\frac{3}{17}$
- B. $\frac{1}{3}$
- C. $\frac{22}{25}$
- D. 0.6

(Question is similar to this)

3. If the sum of 5Y2 and 257 is 8N9 & 8N9 is divisible by 3, then what is the least possible values of N and Y?

Col A: Y+N

Col B: 9

4. If $5 + 2x > 1$, then

Col A: x

Col B: -1.999

5. A certain game has multiple rounds, in each round a participant receives either 2 points or 4 points, the average points received by one particular participant for all the rounds is 2.2

Col A: 9 times the number of rounds in which the participant got 4 points

Col B: The number of rounds in which the participant got 2 points

6. Given X1, X2 & X3 can do a job together in 4 hrs. If X1, X2 can do the same job in 6hrs, then how long would it take for X3 to do the job alone?

7. Col A: Standard deviation of 50, 60, 70, 80 & 90

Col B: Standard deviation of 50, 55, 70, 85 & 90.

8. If a wheel 'A' has half the diameter of wheel B, then

Col A: Number of revolutions made by wheel A to cover 5000 miles

Col B: Number of revolutions made by wheel B to cover 2500 miles

9. If 'N' is a two-digit number with 'x' in tens place and 'y' in units place, then when this

number is multiplied by 5 what will be the result?

- A. 5xy
- B. $5x+5y$
- C. $50x+50y$
- D. $50x+ 5y$

10. Two frequency distribution tables are given.

Table I:

Value Frequency

- 1 3
- 2 3
- 3 3
- 0 7
- 1 3

2 3

3 3

Table II:

Value Frequency

-1 5

-2 3

-3 2

0 6

1 1

2 3

3 5

Out of mean, median & mode which quantity is common for both tables?

A. Mean only

B. Median only

C. Mode only

D. Median & Mode

E. Mean & mode

11. Given a figure as above with circle inside a square, if the area of the square is 16, then

Col A: Area of circle

Col B: 4π

12. There are two plants 'A' & 'B'. The plant 'A'

In, 1st week grows $\frac{1}{4}$ th

2nd week grows $\frac{1}{5}$ th

3rd week grows $\frac{1}{6}$ th

4th week grows $\frac{1}{7}$ th

5th week grows $\frac{1}{8}$ th

6th week grows $\frac{1}{9}$ th

& if plant B grows $\frac{3}{4}$ th in these 6weeks period, then

Col A: Growth of plant 'A' in 6weeks

Col B: Growth of plant 'B' in 6weeks.

13. Which is the greatest prime factor of $3^{100} - 3^{97}$?

14. Given a figure similar to the above, as EFGH inscribed in ABCD, 'E' on AB, 'H' on AD; 'F' is on BC and is the midpoint of BC & a line segment connecting H and C. The point where 'F' intersects HC is G. Here E and H are not mid-pts of respective sides as "F". If angle DHC=45 and side AE=4, then find the area of rectangle EFGH?

15. A circle has centre (0, 2) and a point P (2, -1) lies on its circumference. What is the diameter of the circle?

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4. A certain game has multiple rounds, in each round a participant receives either 2 points or 4 points, the average points received by one particular participant for all the rounds is 2.2

Col A: 9 times the number of rounds in which the participant got 4 points

Col B: The number of rounds in which the participant got 2 points

x --> no: of rounds in which 2pts got

y --> no: of rounds in which 4pts got

$$2x+4y=2.2(x+y)$$

solving $x=9y$

IMO C 🤔

5. Given X_1 , X_2 & X_3 can do a job together in 4 hrs. If X_1 , X_2 can do the same job in 6hrs, then how long would it take for X_3 to do the job alone?

$$\frac{1}{x_1} + \frac{1}{x_2} = \frac{1}{6} \quad \frac{1}{x_1} + \frac{1}{x_2} + \frac{1}{x_3} = \frac{1}{4}$$

IMO 12 🤔

3. If $5 + 2x > 1$, then
Col A: x
Col B: -1.999

IMO D 🤔

Quant:

1. There were a group of horses. Some of them are 7yrs old and others are 11yrs old. If the sum of all their ages is 73, then

Col A: Number of horses of 7yrs old.

Col B: Number of many of 11yrs old.

2. For which of the ranges given below, the product of any two numbers within the range will lie outside the range?

- A. Between 1 and .5
B. Between -1 and 3
C. Between -0.5 and -1
& so on...

3. A series like 7, 8, 8,... some 15 numbers were given. If 15 is added to that series, then the which of the following will be greatest in following?

- A. Mean
B. Mode
C. Median
& so on...

(Something similar to this)

4. If the sum of 5Y2 and 257 is 8N9 & 8N9 is divisible by 3, then what is the least possible values of N and Y?

Col A : $Y+N$
 Col B: 9

5. Given numbers from 1 to 10. Two numbers are to be selected from these 10 numbers and they can be same also. What is the probability that at least one of them is even?

- A. $1/2$
- B. $3/4$
- C. $1/4$
- & so on....

6. If Raymond earns 'd' dollars/hr & works for 'h' hrs and Andrew earns half as that of Raymond, working at the same rate, then find Andrew's earning after 'h+50'hrs in terms of h and d terms?

7. Col A: $(0.01)^{10}$
 Col B: $10^{(-20)}$

8. If the Square 'A' has one of its side 0.1mm more than one of the sides of Square 'B' and if the area of square 'A' is 0.75mm more than the area of Square B, then find the measure of the side of Square B?

9. A triangle in XY-plane was given and asked to find area?

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1. B

Col A = 1 and Col B= 6

2. C

3. A

4. $n=1$, $y=6$

Hence Col b > Cola

5. $1/2$

6. $d/2(h+50)$

7. C

8 3.7

correct me if am wrong..

umesh2010,

I wud like 2 know about question #1 did u jus calculate or use any eqn and for # 7 i thnk its A

$$0.01^{10} = 1/100^{10} = 1/10^{12}$$

$$10^{-20} = 1/10^{20}$$

and as da denominator is gr8r in colB so Cola value is gr8r

hence, ans is A

i do hope i m rite plz correct if i m wrng

Charanj plz help.

q1: ans is B. because the eq we get from the data is $7x+11y=73$...

since..x and y are number of horses...they cant be fractions....so...if we

for integers that obey above eq...x will be 1 and y will be 6....so y is grater than x..

q5. i think answer for this que is $3/4$...reqd probability = $1 - (\text{no. of ways to select both odd})/(\text{total no of ways})$

no. of ways to select both odd = $5*5$ (since repetetion is allowed)

total no..of ways = $10*10$

$$\text{so ans} = 1 - (5*5)/(10*10) = 3/4$$

Que6: @above..... $1/100^{10} = 1/10^{20}$ but not $= 1/10^{12}$because 100 is 10^2 ...and $(a^m)^n = a^{mn}$..but not $a^{(m+n)}$

1st Q just used trial n error method !!

7. Col A: $(0.01)^{10}$

can b written as $(10^{-2})^{10} = 10^{-20} =$ Col B

Hence C is the answer

solution of q5

ans will be $1/2$

$$\text{probability} = [(5p_1 * 5p_1) + (5p_2)]/10p_2 = (25+20)/90 = 1/2 \text{ 😊}$$

Quant:

1. If $5 < x \leq 9$ and $7 < y \leq 9$, then

Col A: x

Col B: y

2. A certain game has multiple rounds, in each round a participant receives either 2 points or 4 points. If the average points received by one particular participant for all the rounds is 2.2, then

Col A: 9 times the number of rounds in which the participant got 4 points

Col B: The number of rounds in which the participant got 2 points

3. Col A: $(0.01)^{10}$

Col B: $10^{(-20)}$

4. If $f(x) = 2x - 3$ & $f(g(x)) = x$, then $g(x) = ???$

5. List 1: k, p, q, r

List 2 : k+6, p+6, q+6, r+6

Col A: Standard Deviation of List 1

Col B: Standard Deviation of List 2

6. Given three angles of triangle as $2x$, $(2y-z)$, $(2z-x)$

Col A: 180

Col B: $x + y + z$

7. Which of the following has exactly 3 distinct common factors as 28 including 1

A. 10

B. 40

C. 72

& so on...

(Something like this)

8. Given a table like above

Range	<input type="text"/>	Frequency
10-19	3	
20-29	5	
30-39	8	
40-49	3	
50-59	3	

Col A: The range of these 22 numbers

Col B: 40

9. The value of $3 \cdot \sqrt{150}$ lies in the range of

A. 15-30

B. 30-60

& so on....

10. Given a series -8, -3, 5, 8, 3, -5..... (Such that every number is the difference of last two numbers)

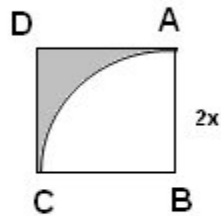
Col A: The number that would first repeat 3rd time is
Col B: 3

11. Given x, y as integers. If $A = 896 \cdot 355 \cdot (x-1)(y+2)$, then

Col A: Unit digit of A

Col B: 0

12.



Given a figure as above with circle inside a square, if the area of the square is 16, then

Col A: Area of circle

Col B: 4π

13. Col A: $\sqrt{120} + \sqrt{50}$

Col B: $\sqrt{80} + \sqrt{90}$

14. What is the highest prime factor of $3^{100} - 3^{97}$?

15. Two frequency distribution tables are given.

Table I:

Value	<input type="text"/>	Frequency
-------	----------------------	-----------

-1 2

-2 3

-3 5

0 7
1 1
2 3
3 3

Table II:

Value	Frequency
-1	3
-2	1
-3	4
0	6
1	1
2	3
3	4

Out of mean, median & mode which quantity is common for both tables?

- A. Mean only
- B. Median only
- C. Mode only
- D. Median & Mode
- E. Mean & mode

16. If 'N' is a two-digit number with 'x' in tens place and 'y' in units place, then when this number is multiplied by 5 what will be the result?

- A. $5xy$
- B. $5x+5y$
- C. $50x+50y$
- D. $50x+ 5y$

17. Six amounts are given say 358\$, 600\$, 478\$, 786\$, 900\$ & 983\$. These amounts represent the profit made by 6 people. Out of these 6 values, there is error in 2 of them, one has been increased by 120\$ and one has been decreased by 120\$ by mistake.

Col A: Standard Deviation of the data given

Col B: Standard Deviation of the actual values (without error)

18. If a wheel 'A' has half the diameter of wheel B, then

Col A: Number of revolutions made by wheel A to cover 5000 miles

Col B: Number of revolutions made by wheel B to cover 2500 miles

19. Given X1, X2 & X3 can do a job together in 4 hrs. If X1, X2 can do the same job in 6hrs, then how long would it take for X3 to do the job alone?
(Question given with values changed)

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1. D
2. C
3. C
4. $g(x) = (x+3)/2$
5. C

- 6. A
- 7. A
- 8. D
- 9. B
- 10. A
- 11. C
- 12. C
- 13. C
- 14. 3
- 15. D
- 16. D
- 17. D
- 18. C
- 19. 12 hrs.

Please correct me if I am wrong ...

- 13. B
- 18 .A

- 1.D
- 2.C
- 3.C
- 4.HELP ME WITH THIS
- 5.C
- 6.A
- 7.C
- 8.A
- 9.B
- 10.B
- 11.C
- 12.C
- 13.B
- 14.13
- 15.D
- 16.D
- 17.D
- 18.A
- 19.12

14. What is the highest prime factor of $3^{100} - 3^{97}$?

$$\begin{aligned} 3^{100} - 3^{97} &= (3^{97} \cdot 3^3) - 3^{97} \\ &= 3^{97}(3^3 - 1) \\ &= 3^{97}(27 - 1) \\ &= 3^{97} \cdot 26 = 3^{96} \cdot 13 \cdot 2 \end{aligned}$$

hence 13 is highest prime factor

Only 10 has 3 unique factors (including 1) ---> 1, 2, 5

in 40 => 1, 4, 8, 5, 10 etc. So, number of distinct factors > 3

in 72 => 1, 2, 6, 4, 18, 36 etc. So, number of distinct factors > 3

I think it is D, because:

First numbers is 10 to 19 is 3 times and last 50-59 3 times.
So, for example, first can be: 17,18,19; last - 50,51,52
and range is $52-17 = 35$

And if it is: 10,11,12 and 50,51,52, then $52-10 = 42$

If $f(x) = 2x-3$ &
 $f(g(x)) = x$, then
 $g(x) = ?$

$f(g(x)) = 2g(x) - 3 = x$
which implies $g(x) = (x+3)/2$

The most formal answer will be like following:

-1

Let $f'(x)$ be $f(x) \dots$ that is inverse of $f(x)$

$f(x) = 2x-3 \Rightarrow f(f'(x)) = 2*f'(x) - 3 \Rightarrow f'(x) = (x + 3)/2$

now, $f(g(x)) = x \Rightarrow f'(f(g(x))) = f'(x) \Rightarrow g(x) = (x + 3)/2$

the question asks for a number which has exactly 3 distinct common factors as 28 including 1

factors of 28 : 1,2,4,7,14,28

factors of 10: 1,2,5,10

factors of 40: 1,2,4,5,10,20,40 etc.

factors of 72: 1,2,4,6,8,18,72, etc.

so 72 has exactly 3 distinct common factors as 28 including 1.
they are: 1,2,4. So, ans is C

Quant:

1. If the median of first 40 students score is 74 and last 65 students score is 78, then what is the median of all 115 scores?

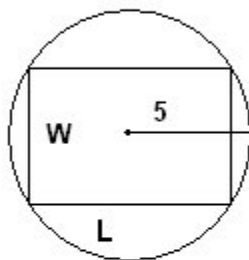
2. If $f(x) = 2x-3$ & $f(g(x)) = x$, then
 $g(x) = ?$
 A. $(x+3)/2$
 & 4 other options were given.

3. If the sum of 5Y2 and 257 is 8N9 & 8N9 is divisible by 3, then what is the least possible values of N and Y?
 Col A: Y+N
 Col B: 9

4. Which of the following is less than 3% of 1
 A. $3/17$
 B. $1/3$
 C. $22/25$
 D. 0.6
 & so on...

5. Given two points A(3, 1) & B(-1, 5) and a perpendicular is drawn from point 'p' to this line AB
 Col A: Slope of the perpendicular line
 Col B: 1

6.



Which of the following is true?
 A. $L^2 + W^2 = 50$

- B. $L^2 + W^2 = 25$
- C. $L^2 + W^2 = 100$
- D. $L^2 + W^2 = 75$
- E. $L^2 + W^2 = 125$

7. If a rectangle's length is increased by 15% and width is decreased by 15%, then

Col A: Area of the initial rectangle
Col B: Area of the later(changed) rectangle

8. If $g(x) = 3^{(x-1)}$, then what is the value of $[g(x+1)-g(x)]/2$?

9. Col A: $2^x * 4^x$
Col B: 2^{3x}

10. There are two names given JOHNSON and JONES. If one letter is picked from both simultaneously at random, then find the probability that the letter is same?

11. Given a series $p_1, p_2, p_3, p_4, \dots$. If $p_1 = 1$ & $p_n = 24 * p_{(n-1)} + 8$, then
Col A: The remainder when p_{66} is divided by 6
Col B: 4
(Here 1, 2, 3, 4, 66, n & n-1 are suffixes)

12. There are two similar cylinders. One cylinder 'A' has water filled to half of its height and is standing on its base. Other cylinder 'B' is lying down with water filled to two third of its height (i.e. its diameter).
Col A: Volume of the Cylinder A
Col B: Volume of the Cylinder B

13. If the average of 6, x and y is 0, then what is the average of x and y?

14. If n is a positive integer, then
Col A: Remainder when $n^2 - n$ is divided by 2
Col B: 0

15. Col A: $(n^2 + 2n)/(n^3 + 2n^2)$
Col B: $1/n$

16. Col A: $x^2 + y^2$
Col B: $(x-1)^2 + (y+1)^2$

17. If $x/y = (\sqrt{2}-1)/2$ & $z = x + y$, then the value of z/y ?

18. A hexagon is embedded in a circle with radius xxx(some value). Find the perimeter of the hexagon in terms of diameter?
(Question is similar to this)

19. If class A has the average score of 40 for 65 students & class B has the average score of XXX for 55 students, then

Col A: Total average score

Col B: Total number of students

20. An equilateral triangle is given with its side around some 20(approx). If its height is $20x$, then find the value of x ?

21. A question with Venn diagram is given like this...

A class has above 100 students. If a teacher took 100 answer sheets & out of them she corrected 22 and all of these 22 got 'A' grade & if 25% of the remaining get 'A' grade, then find the total number of students with 'A' grade?

22. There are two plants 'A' & 'B'.

If the plant 'A', in

1st week grows $\frac{1}{4}$ th

2nd week grows $\frac{1}{5}$ th

3rd week grows $\frac{1}{6}$ th

4th week grows $\frac{1}{7}$ th

5th week grows $\frac{1}{8}$ th

6th week grows $\frac{1}{9}$ th

& if plant B grows $\frac{3}{4}$ th in these 6weeks period, then

Col A: Growth of plant 'A' in 6weeks

Col B: Growth of plant 'B' in 6weeks.

23. For any series, which of these options are equal normally?

I. Mean

II. Median

III. Mode

A. I

B. I and II

C. I and III

D. I, II and III

24. If a wheel 'A' has half the diameter of wheel B, then

Col A: Number of revolutions made by wheel A to cover 5000 miles

Col B: Number of revolutions made by wheel B to cover 2500 miles

25. Col A: The distance from origin to the point (3, 4)

Col B: The distance from origin to the (5, 2)

26. Given a rectangle field whose length 'l' and breath 'b' is made area=25000, such that its length is increased by 10% and its breadth is been decreased by 5 %.

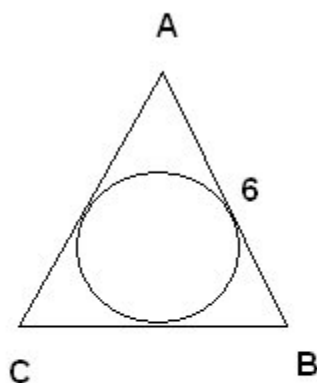
Col A: Change in area of the rectangle

Col B: 1200

27. Given numbers from 1 to 10. Two numbers are to be selected from these 10 numbers and they can be same also. What is the probability that at least one of them is even?

- A. $\frac{1}{2}$
- B. $\frac{3}{4}$
- C. $\frac{1}{4}$
- & so on....

28.



Given a figure like above with a circle inscribed in an [equilateral triangle](#) whose length of one side is given as 6

Col A: Area of circular region

Col B: 9π

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15. Col A: $\frac{n^2 + 2n}{n^3 + 2n^2}$

Col B: $\frac{1}{n}$

IMO C

16. Col A: $x^2 + y^2$

Col B: $(x-1)^2 + (y+1)^2$

col A: $x^2 + y^2$

Col B: $(x-1)^2 + (y+1)^2 = x^2 + 1 - 2x + y^2 + 1 + 2y$

subtracting $x^2 + y^2$ from both sides.....

col A:1

col B:2(y-x+1)

IMO D

17. If $x/y = (\sqrt{2}-1)/2$ & $z = x + y$, then the value of z/y ?

IMO $(\sqrt{2}+1)/2$

18. A hexagon is embedded in a circle with radius xxx(some value). Find the perimeter of the hexagon in terms of diameter?

(Question is similar to this)

IMO $6 \times \text{radius}$ (if regular hexagon)

1. 78
2. $(x+3)/2$
3. B
4. None of these
5. C
6. C
7. A
8. $3^x - 3$
9. C
10. $6/35$
11. B
12. B
13. -3
14. C
15. C
16. D
17. $(\sqrt{2}+1)/2$
18. $6r$ ($r = \text{radius}$)
19. Data insufficient
20. Area of equi triangle = $h^2/\sqrt{3}$
21. donno..
22. A
23. ??? is it none of these !!!
24. A
25. B
26. B (Col A = 1125)
27. $3/4$
28. Gen formula = $\pi/12(x^2)$ Here $x = 6$
 $\Rightarrow 3\pi = \text{Col a}$
hence Col B is greater...

pls correct me if wrong...

ya.. 8th urs is correct... i made a silly mistake

n 10th one (credits to ankush in orkut forum)

common letters

johnson jones

j j
nn n
oo o
s s

$$1/7 \cdot 1/5 + 2/7 \cdot 1/5 + 2/7 \cdot 1/5 + 1/7 \cdot 1/5 = 6/35$$

[quote="umesh2010"]1. 78

2. $(x+3)/2$

3. B

4. None of these

5. C

6. C

7. A

8. $3^x - 3$

9. C

10. $6/35$

11. B

12. B

13. -3

14. C

15. C

16. D

17. $(\sqrt{2}+1)/2$

18. $6r$ (r =radius)

19. Data insufficient

20. Area of equi triangle = $h^2/\sqrt{3}$

21. donno..

22. A

23. ??? is it none of these !!!

24. A

25. B

26. B (Col A = 1125)

27. $3/4$

28. Gen formula = $\pi/12(x^2)$ Here $x=6$

=> $3\pi = \text{Col a}$

hence Col B is greater...

pls correct me if wrong...[/quote]

plz tell me how to do #1 and also da gen formula of # 28

cos i hav my exams on 27

Anyone please explain Q6??

IMO, answer of Q3 will be D ... Please see the proof below ...

Given, $5Y + 257 = 8N$

So, $Y + 5 = N + 10$ (10 is for carry) --> $Y = N + 5$ --> $Y + N = 2N + 5$

Again, $8+N+9 = 3n$ (n is integer) $\rightarrow N = 3n - 17$

$\rightarrow N = 1$ (for, $n=6$) or $N = 4$ (for, $n=7$) or $N = 7$ (for, $n =$ 🤖
However, for $N=7 \rightarrow Y= 12$ so, it is not possible.

So, Possible values, ($N = 1$ and $Y = 6$) or ($N = 4$ and $Y = 9$)
Therefore, $Y + N =$ either $2*1 + 5 = 7$ or $2*4 +5 = 13$.

#6

The diagonal of the rectangular = $5+5 = 10$
and we can deduce the value of the diagonal as $L^2+W^2 = 10^2$
(pythagorean theorem)

hence, $L^2+W^2=100$

Hope u do undrstand and hope dat I am rite

Plz explain # 1.

[quote="chayanbd"]Anyone please explain Q6??

IMO, answer of Q3 will be D ... Please see the proof below ...

Given, $5Y^2 + 257 = 8N^9$

So, $Y + 5 = N + 10$ (10 is for carry) $\rightarrow Y = N + 5 \rightarrow Y+N = 2*N+5$

Again, $8+N+9 = 3n$ (n is integer) $\rightarrow N = 3n - 17$

$\rightarrow N = 1$ (for, $n=6$) or $N = 4$ (for, $n=7$) or $N = 7$ (for, $n =$ 🤖
However, for $N=7 \rightarrow Y= 12$ so, it is not possible.

So, Possible values, ($N = 1$ and $Y = 6$) or ($N = 4$ and $Y = 9$)
Therefore, $Y + N =$ either $2*1 + 5 = 7$ or $2*4 +5 = 13$.[/quote]

chayanbd,

they have asked for da least possible values of Y and N

and da least possible dat fulfills da condition will be $Y = 6$ and $N= 1$ and $Y+N= 6+1 = 7$ and
so, da value is smaller than Col B and

answer is Col B is greater.

Quant:

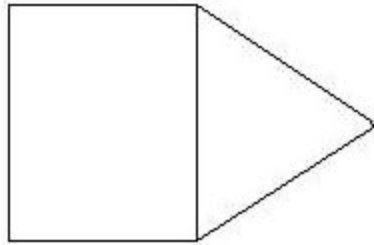
1. If 'A' wheel has half the diameter of 'B' wheel, then

Col A: Revolutions made by wheel A to complete 5000 revolutions

Col B: Revolutions made by wheel B to complete 2500

revolutions

2.



If perimeter of the above pentagon is 30, then find the area of the pentagon?

3. If a plant grows half of its previous height every day, then what will be its ratio of increase of height for 4th day to 7th day increase?

4. Given numbers from 1 to 10. Two numbers are to be selected from these 10 numbers and they can be same also. What is the probability that at least one of them is even?

A. $\frac{1}{2}$

B. $\frac{3}{4}$

C. $\frac{1}{4}$

& so on....

5. A figure of hexagon with circle circumscribed in it and asked to find the perimeter of in terms of diameter?

6. Given slope of the line and a point (a, b) , asked to find y intercept in terms of a & b.

7. Col A: The distance from origin to the point $(3, 4)$

Col B: The distance from origin to the $(5, 2)$

8. There are two plants 'A' & 'B'. The plant 'A'

In, 1st week grows $\frac{1}{4}$ th

2nd week grows $\frac{1}{5}$ th

3rd week grows $\frac{1}{6}$ th

4th week grows $\frac{1}{7}$ th

5th week grows $\frac{1}{8}$ th

6th week grows $\frac{1}{9}$ th

& if plant B grows $\frac{3}{4}$ th in these 6 weeks period, then

Col A: Growth of plant 'A' in 6 weeks

Col B: Growth of plant 'B' in 6 weeks.

9. Given x, y as integers. If $A = 896 \cdot 355 \cdot (x-1)(y+2)$, then

Col A: Unit digit of A

Col B: 0

10. If the length of a rectangle is increased by 10% and its width is decreased by 10%, then what is the new area of the rectangle?

A. Increased by 10%

B. Increased by 1%

C. Remains same

D. Decreased by 1%

E. Decreased by 10%

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Quant:

1. A vendor sells oranges for 0.15\$ and grapes for 0.35\$ each. If he sells them together with 40

in a basket at 7.05\$ without any profit, then how many oranges are in a basket?

2. There are two shelves 'S' and 'T' with books. If 3 books are taken from 'S' and put in 'T'

then the number of books in each equals. If 7 books are

taken from 'T' and put in 'S' then the number of books in 'S' is 3 times of that in 'T'. Find the

total number of books in both the shelves?

3. If perimeter of a rectangle A is 20 & perimeter of rectangle B is 24, then

Col A: Area of the rectangle

Col B: Area of the rectangle

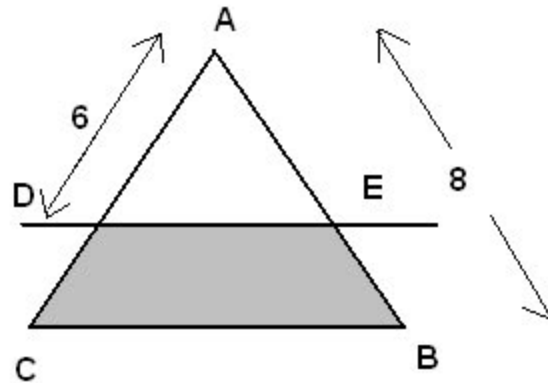
4. If $f(x) = 1-x$ & $y = f(x)$, then find $f(y)$?

5. Given X_1, X_2 & X_3 can do a job together in 4 hrs. If X_1, X_2 can do the same job in 6 hrs, then how long would it take for X_3 to do the job alone?

6. The value of $\sqrt{3x^4}/\sqrt{3x^2}$ is.....?

7. Two squares were given and the side values were given one is 9 and the other is 10, the square with the side 10 was truncated, and asked to compare the area of the two squares?

8.



Given that triangle ABC and AED are equilateral triangles, if $AB = 8$ & $AD = 6$, then find the area of the shaded region BCDE?

9. Col A: $\sqrt{120} + \sqrt{50}$

Col B: $\sqrt{80} + \sqrt{90}$

10. What is the highest prime factor of $3^{100} - 3^{97}$?

11. If a wheel 'A' has half the diameter of wheel B, then

Col A: Number of revolutions made by wheel A to cover 5000 miles

Col B: Number of revolutions made by wheel B to cover 2500 miles

12. Two frequency distribution tables are given.

Table I:

Value Frequency

-1 3

-2 3

-3 3

0 7

1 3

2 3

3 3

Table II:

Value Frequency

-1 5
 -2 3
 -3 2
 0 6
 1 1
 2 3
 3 5

Out of mean, median & mode which quantity is common for both tables?

- A. Mean only
- B. Median only
- C. Mode only
- D. Median & Mode
- E. Mean & mode

13. Col A: $w(2x+2y+2z+1)$

Col B: $2w(x+y+z)$

14. There were a group of horses. Some of them are 7yrs old and others are 11yrs old. If the sum of all their ages is 83, then

Col A: Number of horses of 7yrs old.

Col B: Number of horses of 11yrs old.

15. Find the range of numbers between 400 and 700 that are multiples of both 2 & 3?

16. Given a table like above

Range Frequency

10-19 3

20-29 5

30-39 8

40-49 3

50-59 3

Col A: The range of these 22 numbers

Col B: 40

17. Given a series -8, -3, 5, 8, 3, -5..... (Such that every number is the difference of last two numbers)

Col A: The number that would first repeat third time is

Col B: 3

18. Given a figure as above with circle inside a square, if the area of the square is 16, then

Col A: Area of circle

Col B: 4π

19. What is the highest prime factor of $3^{100} - 3^{97}$?

20. Col A: $\frac{1}{2^3}$

Col B: $\frac{1}{3^2}$

21. If $x^* = 1 - x$ and $y^* = x$, then what is the value of y ?

A. x

B. 0

C. $1-x$

& so on...

22. Col A: $x^2 - 36 = 0$

Col B: $x(x+8)(x-7)$

23. If ' x ' is an integer greater than 0 , then

Col A: $2/x$

Col B: $x/3$

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Last edited by admin on Fri Nov 28, 2008 11:18 am; edited 1 time in total

1 35

2 40

3 d

4 x

5 12

6 x

7 not clear

8 $7\sqrt{3}$

9 b

10 13

11 a

12 d

13 d

14 b

15 50

16 d

17 b

18 c

19 13

20 a

21 c not sure

22 d

23 d

13. Col A: $w(2x+2y+2z+1)$

Col B: $2w(x+y+z)$

IMO A

cancelling $2w(x+y+z)$ on both columns....

col A: 1

col B: 0

21. If $x^* = 1 - x$ and $y^* = x$, then what is the value of y ?

- A. x
- B. 0
- C. $1-x$
- & so on...

ans: $1-x$

...San

1. I've got equations: $0.15x + 0.35y = 7.05$ and $x + y = 40 \Rightarrow x=34.75$ (number of oranges); correct me if I'm wrong
2. 40
3. D (because rectangle A have max area = 16 (when $a=2$, $b=8$), but rectangle B have max area = 32 ($a=8$, $b=4$), but at the same time $S(A)=16$, $S(B)=12 \Rightarrow$ answer is D)
4. x
5. 12
6. x
7. ??
8. $7\sqrt{3}$
9. B
10. 13
11. A
12. D
13. D (compare w and 1)
14. B
15. 294 ('cos $\text{range} = \text{max value} - \text{min value}$, in that case $\text{max}=696$ (which divisible both by 2 and 3, it means divisible by 6) and $\text{min}=402$. $696-402=294$)
16. A (but I'm not sure. I think it is $\text{range}=59-10=49$, but could you manoj explain why you got D?)
17. B
18. C
19. 13
20. A
21. D
22. D

gre_chase

16. Given a table like above

Range	Frequency
10-19	3
20-29	5
30-39	8
40-49	3
50-59	3

10-19 3

20-29 5

30-39 8

40-49 3

50-59 3

Col A: The range of these 22 numbers

Col B: 40

until we know individual values of 22num's we can't find range

b'coz see this example:

$\text{range} = \text{big} - \text{small}$ (for simplicity)

if we take 10 & 59 then range=49

if we take 19 & 50 then range=31

as itz a double case ans is Disn't it 🤔[/b]

...San

22. Col A: $x^2 - 36 = 0$

Col B: $x(x+8)(x-7)$

in col A 🤔 $x^2 - 36 = 0 \implies x$ may be 6 or -6

if we take 6 then col b: -ve

if we take -6 then col b: +ve

as itz a dual case ans is D

...San

13. Col A: $w(2x+2y+2z+1)$

Col B: $2w(x+y+z)$

ANS is A. Check out the following explanation.

First, Divide Column A and B with w

Col A = $(2x+2y+2z + 1)$

Col B = $2(x+y+z) = 2x+2y+2z$

Now, Subtract $2x+2y+2z$ from both columns

Col A = 1

Col B = 0

So, Ans A

$$7x + 11y = 83$$

$$x = 4; y = 5$$

$$x = 7; y = 4$$

Both satisfy the equation. So, ANS D IMO

This is for question no 14:

$$7x + 11y = 83$$

$$x = 4; y = 5$$

$$x = 7; y = 4$$

Both satisfy the equation. So, ANS D IMO

Quant:

1. Col A: Slope of line joining points $(-5, 3)$ & $(-2, 3)$
Col B: Slope of line joining points $(2, 3)$ & $(0, -2)$

2. If 'x' is a positive integer and $x^2 = 72$, then
Col A: $x/36$
Col B: $2/x$

3. Given a series 3, -5, 2, -1, 3, -5, 2, -1.....
Find the 97th term?

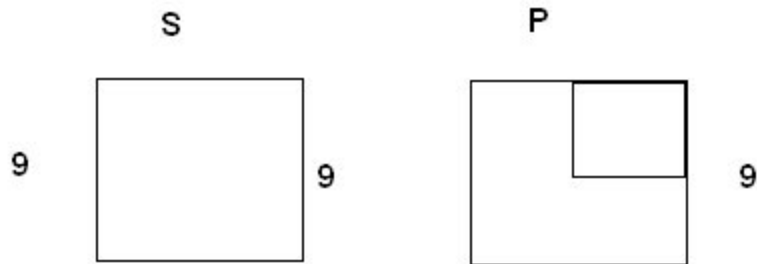
4. If $x^* = 1 - x$ and $y^* = x$, then what is the value of y?

5. If a plant grows half of its previous height every day, then what will be its ratio of increase of height for 4th day to 7th day increase?

6. The value of $9^{60}/3^{20}$?
A. 3^{160}
B. 3^3
C. 3^2
D. 3^{100}
E. 3^{40}

7. $3\sqrt{150} = ?$
A. $2\sqrt{15}$
B. $2\sqrt{17}$
C. 4
D. 5
E. 6

8.

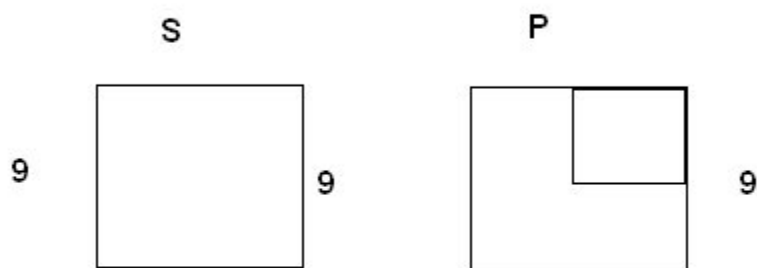


Given a figure of two similar squares 'S' & 'P' of side length 9

Col A: Area of square 'S'

Col B: $\frac{4}{3}$ (Area of square 'P')

9. Given the ratio of the angles of figure below is $x/y = \frac{2}{3}$



If the ratio of $x/y = 3/2$, then the value of angle x is?

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- 1...0
- 2...c
- 3...3
- 4...1-x
- 5...8/37
- 6...d
- 7... 8/27
- 8...b
- 9...no..sufficient...data 🙄

correct me if i'm wrong 😊

...San

- 1 b
- 2 a
- 3 8
- 4 $1-x^*$
- 5 ... how u solve this ? increase for each day $1/2 \Rightarrow$ 1st is 1 2nd $1+1/2$
3rd 2 4th $2 \frac{1}{2}$ 5th 5 6 $5\frac{1}{2}$ 7th 7
ratio 4th day = $2 \frac{1}{2} / 7 = 1/7$ 😊
- 6 3^{42} ???????
- 7 $15\sqrt{6}$
- 8 b

1. B
2. C (you got 1/18 in each columb)
3. 3
4. $y=1-x$
5. ? san explain it to us, please!
6. D ($9^{60} = 3^{120} \Rightarrow (3^{120})/(3^{20}) = 3^{(120-20)}=3^{100}$)
7. $15\sqrt{6}$
8. B
9. no sufficient data

my anwer is 8/27

let the initial height be h

now day one = it will increase by $h/2$ so the new height will be $h + h/2 = 3h/2$

dy 2 = it will increase by $[(3h/2)/2] \ 3h/4$ so the new height will be $3h/2 + 3h/4 = 9h/4$

dy 3 = -----by $[(9h/4)/2] \ 9h/8$ so the ----- $9h/4 + 9h/8 = 27h/8$

dy 4 = -----by $[(27h/8)/2] \ 27h/16$ so the ----- $27h/8 + 27/16 = 81h/16$

now see the trend for increase in height: numerator *3 and denometer *2

so dy 5 = $81h/32$

dy 6 = $243h/64$

dy7 = $729h/128$

Now we don't have to find the increase in height compared to day 1! we have to check it with respect to previous day not the first day!

day 4 increase = $27h/16$

and day 7 = $729h / 128$

So the ratio is $8/27$ solve and get!

I hope it is clear ... 😊

...San

If $x^* = 1 - x$ and $y^* = x$, then what is the value of y ?

substitute y for x in $x^*=1-x$

then plug in the option 1,2,3

for 3rd option :

$$\begin{aligned} y^* &= 1-x \\ &= 1-(1-x) \\ &= 1-1+x \\ &= x \end{aligned}$$

clear!!!

...San